FUNAI

DVD/CD PLAYER & VIDEO CASSETTE RECORDER VHS PAL

DBVR-7730D

Owner's Manual

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Supplied Accessories

- Remote control
- Two R6 (AA) batteries
- RF cable
- Scart cable
- Owner's Manual

Model/Serial Number

This appliance has a serial number located on the rear panel. Please note down the serial number and retain the information for your records.

Model number: DBVR-7730D

Serial number: _____

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Laser Safety

This unit employs a laser. Only a qualified service person should remove the cover or attempt to service this device, due to possible eye injury.

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION:

VISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID EXPOSURE TO BEAM.

LOCATION:

- PRINTED ON THE BACK

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

Important

- Use only discs marked DVD or disc with this DVD.
- Use only cassettes with the VHS mark with this VCR.

Power Supply

The power supply is engaged when the mains plug is plugged in a 220-240 V~, 50 Hz AC outlet. To operate the unit, press **STANDBY-ON** to turn on the unit.

WARNING: LIVE PARTS INSIDE.
DO NOT REMOVE ANY SCREWS.

Dew Warning

Moisture condensation may occur inside the unit when it is moved from a cold place to a warm place, or after heating a cold room or under conditions of high humidity. Do not use the unit at least for 2 hours until its inside is dry.

Caution

1) Do not attempt to open the cabinet. There are no parts you can service inside. Refer all servicing to qualified service personnel.
2) Slots and openings in the cabinet and the sides or bottom are provided for ventilation. To ensure reliable operation and to protect the unit from overheating, these openings must not be blocked or covered.
Avoid installation in enclosed spaces such as bookcases unless proper ventilation is provided.
3) Keep the unit away from radiators and other heat sources.
4) Avoid use near strong magnetic fields.
5) Do not push objects of any kind into the unit through the cabinet slots or openings as they could touch electrically live parts or short circuit parts resulting in a fire or electric shock.
6) Never spill liquid on this unit. If liquid is spilled and penetrates into the unit, consult qualified service personnel.
7) Do not stand the unit up vertically. Use this unit in a horizontal (flat) position only.
8) Before attempting to operate the unit, make sure that the timer recording mode is "OFF".
9) This product is in Stand-by mode when it turns off while the power cord is connected.
10) Do not place any combustible objects on the device (candles, etc.).
11) Be sure to remove a disc and unplug the mains cord from the outlet before carrying the unit.
12) Disconnect the mains plug to shut off when find trouble or not in use.
13) The mains plug shall remain readily operable.
14) Read both manual instructions to ensure correct and safe installation and interconnection of the unit in multimedia systems.
15) Keep the distances 20 cm around apparatus of ventilation openings.

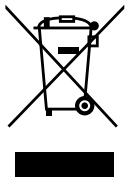
Positioning

Do not place the unit directly on top of, or underneath, your TV set. Ensure that there is at least 20 cm between the unit and the TV set, and that air can circulate freely through the ventilation openings of the unit.

A Note About Recycling

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with your local recycling regulations.

This product consists of materials which can be recycled and reused if disassembled by a specialised company.
Batteries should never be thrown away or incinerated but disposed of in accordance with your local regulations concerning chemical wastes.



Connection to Power

Before Switching on make sure that the voltage of your electricity supply is the same as that indicated on the rating plate.

Mains Cord

This appliance may be fitted with a non-rewireable plug. If it is necessary to change the fuse in a non-rewireable plug the fuse cover must be refitted. If the fuse cover is lost or damaged, the plug must not be used until a replacement available from the appliance manufacturer is obtained.
It is important that the colour of the replacement fuse cover corresponds with the rating marking on the base of the plug. If the plug has to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug removed must be disposed of safely as insertion into a 13A socket is likely to cause an electrical hazard. For your own safety read the following instructions carefully before attempting to connect this unit to mains.
The wires in this mains lead are coloured in accordance with the following code:

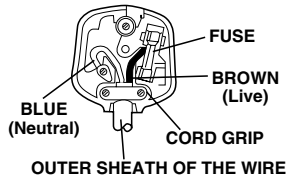
BLUE=NEUTRAL, BROWN=LIVE

Important

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:-
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
No connection is to be made to the earth terminal of the plug.
If a 13 Amp (BS 1363) Plug is used, a 3 Amp Fuse must be fitted, or if any other type of Plug is used a 3 or 5 Amp Fuse must be fitted, either in the Plug or Adaptor, or on the Distribution Board.

Mains Supply: 220 - 240 V ~ 50 Hz - AC only

Do not make any connection to the larger pin marked with the letter “E” or by the symbol ⏚ or coloured green or green and yellow.



Playable Discs

The following discs can be played back on this unit.

- DVD-Video with region code 2 or ALL (*1, 2, 3, 5, 7)

- DVD+R/RW (*1, 4, 5, 6, 7, 8, 9)

- DVD-R/RW including DivX® files (*1, 5, 6, 7, 8, 9)

- Audio CD (*5, 7)

- CD-R/RW including MP3, JPEG and DivX® files (*5, 6, 7, 8, 9)

- Picture CD (*5, 7)

- Video CD (*1, 5, 7)

- DTS-CD (*5, 7)

DVD is a trademark of DVD Format/Logo Licensing Corporation.

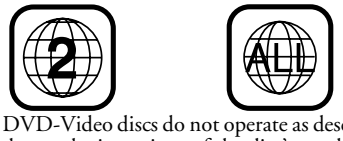
"Kodak Picture CD COMPATIBLE" is trademark of Eastman Kodak Company.

DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

Note:

*1: This unit conforms to the PAL colour system. Also you can play discs recorded with the NTSC system via a PAL system TV set.

*2: The region code 2 or ALL are marked on DVDs as follows.



*3: Certain DVD-Video discs do not operate as described in this manual due to the intentions of the disc's producers.

*4: Only the discs recorded in the video format and finalised can be played back. Discs unfinalised cannot be played back. Depending on the recording status of a disc, the disc may not be played back at all or normally (the picture or sound may not be smooth, etc.).

*5: Scratched or stained discs may not be played back.

*6: Some discs cannot be played back because of incompatible recording conditions, characteristics of the recorder or special properties of discs.

*7: You can play back discs which bear marks above. If you use nonstandardized discs, this unit may not play them back. Even if they are played back, the sound or video quality will be compromised.

*8: If the disc's recording space is small (Disc size is shorter than 55mm across), it may not be played back.

*9: Do not glue paper or put stickers onto the disc. These may damage the disc, and the unit may not read it correctly.

Unplayable Discs

- **NEVER play back the following discs. Otherwise, malfunction may result!**
  DVD-RAM
  CD-i
  Photo CD
  DVD with region codes other than 2 or ALL
  DVD-ROM for personal computers
  CD-ROM for personal computers
- **On the following disc, the sound MAY NOT be heard.**
  Super Audio CD
  DVD-Audio

Note: • Only the sound recorded on the normal CD layer can be delivered.
The sound recorded on the high density Super Audio CD layer cannot be delivered.

- Any other discs without compatibility indications.

Important Copyright Information

DVD:

Unauthorized copying, broadcasting, public performance and lending of discs are prohibited.
This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

VCR:

Unauthorised recording or use of broadcast television programming, video tape, film or other copyrighted material may violate applicable copyright laws. We do not take responsibility for the unauthorised duplication, use, or other acts which infringe upon the rights of copyright owners.

Symbols Used in this Manual

The following symbols appear below in some headings and notes in this manual, with the following meanings:

DVD-V
: Description refers to playback of DVD-Video discs.

CD
: Description refers to playback of Audio CDs.

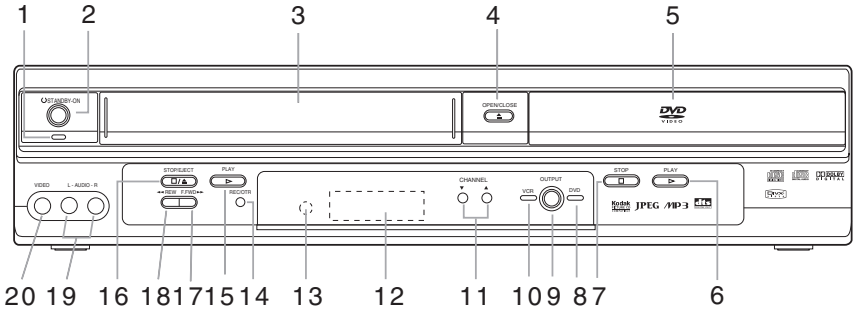
MP3
: Description refers to playback of CD-R/RW discs with MP3 files.

JPEG
: Description refers to viewing of CD-R/RW discs with JPEG files.

VCD
: Description refers to playback of Video CDs.

DivX®
: Description refers to playback formatted with DivX®.

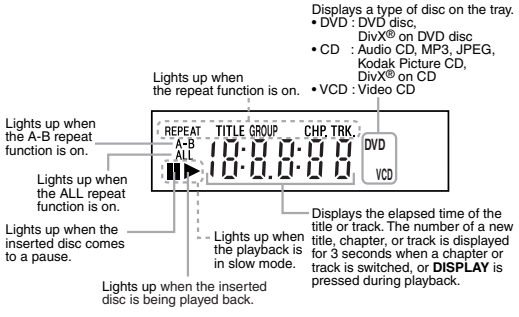
Front Panel



1. **⏻STANDBY-ON indicator**
   The indicator is on when this unit is turned on.
2. **⏻STANDBY-ON**
   To turn the unit ON or OFF.
3. **Cassette Compartment**
4. **OPEN/CLOSE (DVD)**
   To open or close the disc tray.
5. **Disc tray**
6. **PLAY ► (DVD)**
   To begin disc playback.
7. **STOP ■ (DVD)**
   To stop playback.
8. **DVD OUTPUT indicator (Green)**
   The indicator is on when this unit is in the DVD mode. Make sure that this indicator is on before using the DVD player.
9. **OUTPUT**
   To select the DVD mode or VCR mode.
10. **VCR OUTPUT indicator (Green)**
    The indicator is on when this unit is in the VCR mode. Make sure that this indicator is on before VCR operation.
11. **CHANNEL (VCR)**
    To change TV channels.
    To adjust the tracking manually during playback.
12. **Display**
13. **Remote Sensor**
14. **REC/OTR (VCR)**
    Press once to start recording or repeatedly to start One-Touch Recording.
15. **PLAY ► (VCR)**
    To begin tape playback.
16. **STOP/EJECT (VCR)**
    To stop playback.
    To eject the tape in the Stop mode.
17. **F.FWD ►► (VCR)**
    To fast forward the tape.
18. **REW ◄◄ (VCR)**
    To rewind the tape.
19. **AUDIO in jacks**
    Connect Audio cables coming from the audio out jacks of a camcorder, another VCR, or an audio source here.
20. **VIDEO in jack**
    Connect a Video cable coming from the video out jack of a camcorder, another VCR, or an audio-visual source (laser disc player, video disc player, etc.) here.

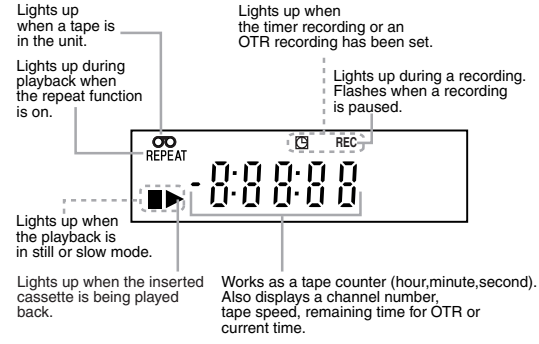
Display

DVD output mode


Displays a type of disc on the tray.
• DVD : DVD disc, DivX® on DVD disc
• CD : Audio CD, MP3, JPEG, Kodak Picture CD, DivX® on CD
• VCD : Video CD
Lights up when the repeat function is on.
Lights up when the A-B repeat function is on.
Lights up when the ALL repeat function is on.
Lights up when the inserted disc comes to a pause.
Lights up when the playback is in slow mode.
Lights up when the inserted disc is being played back.
Displays the elapsed time of the title or track. The number of a new title, chapter, or track is displayed for 3 seconds when a chapter or track is switched, or DISPLAY is pressed during playback.
REPEAT
A-B
ALL
TITLE GROUP
CHP. TRK.
DVD
VCD

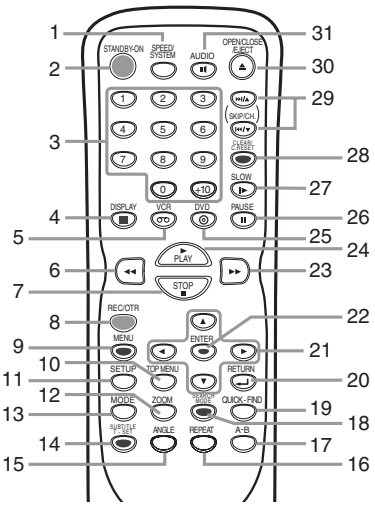
- - - - -	No disc inserted or displaying DVD menu
OPEN	Opening the tray
CLOSE	Closing the tray
Load	Loading the disc or turning this unit on
Pbc	Playback control function of a Video CD is activated

VCR output mode


Lights up when a tape is in the unit.
Lights up during playback when the repeat function is on.
Lights up when the timer recording or an OTR recording has been set.
Lights up during a recording. Flashes when a recording is paused.
Lights up when the playback is in still or slow mode.
Lights up when the inserted cassette is being played back.
Works as a tape counter (hour,minute,second). Also displays a channel number, tape speed, remaining time for OTR or current time.
REPEAT
REC

- ∞, ⏲ and REC mark will disappear when you set this unit in DVD mode. However, the function indicated by each mark is still working.

Remote Control



1. **SPEED/SYSTEM (VCR)**
   To change the recording speed.
   (Only the function of SPEED is available for this unit.)
2. **STANDBY-ON**
   To turn the unit ON or OFF.
3. **0-9 Number buttons**
   To select numbered items on the menu screen. (DVD)
   To select chapters, titles or tracks directly. (DVD)
   To select a channel. (VCR)
   +10 (DVD)
   To enter 10 and over.
4. **DISPLAY**
   To display the current playback mode. (DVD)
   To display the current time, tape counter and channel number. (VCR)
5. **VCR**
   Press this button before using the remote control for VCR features.
6. **◄◄**
   To search backward through the disc. (DVD)
   To rewind the tape. (VCR)
7. **STOP ■**
   To stop playback. (DVD)
   To stop playback or recording. (VCR)
8. **REC/OTR (VCR)**
   Press once to start recording or repeatedly to start One-Touch Recording.
9. **MENU**
   To call up the menu on a DVD. (DVD)
   To call up the FILE LIST. (DVD)
   To call up the VCR menu. (VCR)
10. **TOP MENU (DVD)**
    To call up the title menu on a DVD.
    To return to the top file of the highest hierarchy in the PROGRAM and the FILE LIST.
11. **SETUP (DVD)**
    To access or remove the DVD setup menu.
12. **ZOOM (DVD)**
    To magnify the part of picture.
13. **MODE (DVD)**
    To set up Programmed or Random Playback for Audio CDs, MP3 and JPEG files.
    To set the Virtual Surround ON or OFF.
    To activate the Virtual Surround or x1.3 and x0.8 Rapid Play with Voice.
14. **SUBTITLE (DVD)**
    To change subtitles on a DVD.
    T-SET (VCR)
    To put the VCR into Standby mode for a timer recording.
15. **ANGLE (DVD)**
    To change camera angles on a DVD.
    To rotate a picture of JPEG files.
16. **REPEAT (DVD)**
    To play the selected chapter, title, track, group or a whole disc repeatedly.
17. **A-B (DVD)**
    To repeat between your chosen point A and B.
18. **SEARCH MODE**
    To search chapters, titles, tracks, markers or time. (DVD)
    To call up the index or time search menu. (VCR)
19. **QUICK-FIND (VCR)**
    To skip to the beginning of next programme.
20. **RETURN (DVD)**
    To return to the previous operation in the menu.
21. **Cursor ▲ / ▼ / ◄ / ►**
    To move the cursor.
22. **ENTER (DVD)**
    To confirm your menu selections.
23. **►►**
    To search forward through the disc. (DVD)
    To fast forward the tape. (VCR)
24. **PLAY ►**
    To begin playback.
25. **DVD**
    Press this button before using the remote control for DVD features.
26. **PAUSE ❚❚**
    To pause playback. (DVD)
    To advance playback one frame at a time. (DVD)
    To pause playback or recording. (VCR)
    To advance playback one frame at a time. (VCR)
27. **SLOW (VCR)**
    To view the tape in slow motion.
28. **CLEAR (DVD)**
    To clear the markers.
    To clear the incorrect input.
    To cancel the point for A-B repeat on a DVD and a CD.
    C.RESET (VCR)
    To reset the tape counter.
29. **SKIP |◄◄ ►►| (DVD)**
    To skip chapters or tracks.
    CH. ▲/▼ (VCR)
    To change TV channels.
    To adjust the tracking manually during playback.
30. **OPEN/CLOSE (DVD)**
    To open or close the disc tray.
    EJECT (VCR)
    To eject the tape from the VCR.
31. **AUDIO**
    To change audio languages on a DVD. (DVD)
    To change sound modes of a CD. (DVD)
    To change sound modes. (VCR)

Loading Batteries

1) Open the battery compartment cover.
2) Insert two R6 (AA) batteries, with each one oriented correctly.
3) Close the cover.

Note: • Do not mix alkaline and manganese batteries.
• Do not mix old and new batteries.

DVD/VCR Switching

Since this product comprises DVD player and VCR, it is necessary to select the correct output mode.

SWITCHING TO DVD MODE

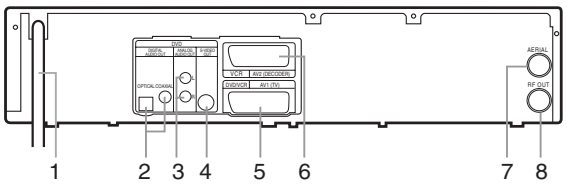
Press **DVD** on the remote control or **OUTPUT** on the front panel. (Make sure that the DVD OUTPUT indicator is lit.)

SWITCHING TO VCR MODE

Press **VCR** on the remote control or **OUTPUT** on the front panel. (Make sure that the VCR OUTPUT indicator is lit.)

Note: • Pressing only **OUTPUT** on the front panel does not switch the mode of the remote control. To change the mode of the remote control, press **DVD** or **VCR** on the remote control.

Rear View



1. **Power Cord**
   Connect to a standard AC outlet.
2. **DIGITAL AUDIO OUT (OPTICAL, COAXIAL) jacks (DVD only)**
   Connect to an amplifier with digital input jacks such as Dolby Digital decoder, DTS decoder, etc. Use a commercially available Optical or Coaxial cable.
3. **ANALOG AUDIO OUT jacks (DVD only)**
   Connect to the audio input jacks of your TV or stereo system. Use commercially available Audio cables.
4. **S-VIDEO OUT jack (DVD only)**
   Connect to the S-VIDEO input jack on your TV. Use a commercially available S-Video cable.
5. **AV1 (TV) jack**
   Connect to the scart jack on your TV. Use the supplied Scart cable.
6. **AV2 (DECODER) jack (VCR only)**
   Connect a Scart cable from another VCR, camcoder, or an audio/video source.
7. **AERIAL jack**
   Connect to an antenna or cable.
8. **RF OUT jack**
   Connect to the antenna in jack of your TV, cable box or direct broadcast system. Use the supplied RF cable.

CAUTION: Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Setting up Your DVD/VCR

Before Connecting

- Be sure to turn off the unit and equipment to be connected before connecting.
- Refer to the instruction books for your TV, stereo system and any other equipment to be connected.
- Be sure to keep the unit connection cables separate from the TV antenna cable when you install the unit, because it may cause electrical interference when you are watching television programmes.
- DTS audio cannot be produced with an analogue connection.
- Please refer to the instruction books of your TV, DVD/VCR, Stereo System or other devices as necessary to make the best connections.
- Make one of the following connections, depending on the capabilities of your existing equipment.

The following guidelines are options for the best picture and sound quality available on your DVD/VCR.

Picture

1) Use SCART Output (DVD/VCR(AV1 TV)) for the best picture quality (for DVD and VCR features).
2) Use S-VIDEO OUT for the better picture quality (for DVD features only).

Note: • When your TV conforms to RGB input signal, the Euro AV (scart) connection ensures you the best picture and audio quality. However if your TV does not conform to RGB input signal, the S-VIDEO OUT and ANALOG AUDIO OUT connection is better (for DVD features only).

Sound

1) Use SCART Output (DVD/VCR(AV1 TV)) for best sound quality (for DVD and VCR features).
2) Digital audio connections provide the clearest sound. Connect the unit's DIGITAL AUDIO OUT (either COAXIAL or OPTICAL) to your amplifier or receiver (for DVD features only).
3) If digital connections are not possible, connect the unit's ANALOG AUDIO OUT (Left and Right) to your amplifier, receiver, stereo or TV (for DVD features only).

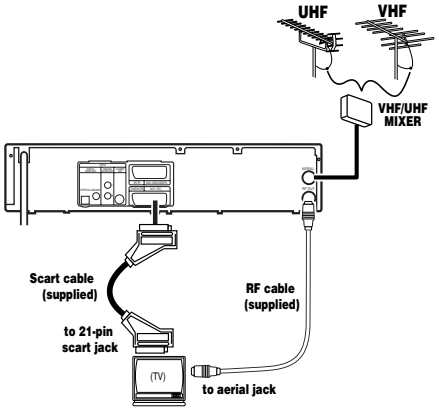
WARNING!

- Never make or change connections with the power switched on.
- Connect the unit directly to your TV, instead of eg. a VCR, to avoid distortion because DVD-Video discs are copy protected.
- Do not connect the ANALOG AUDIO OUT of the unit to PHONO IN of your amplifier or receiver.
- If you use the Scart cable, it is not necessary to connect the analog Audio cables.

Connecting to a TV

1) Disconnect the TV's power cord from the AC outlet.
2) Disconnect the antenna or cable from your TV.
3) Connect that antenna or cable to the AERIAL jack of this unit.
4) Connect the RF OUT jack of this unit to the antenna in jack of your TV. Use the supplied RF cable.
5) Connect the AV1 (TV) scart jack of this unit to the scart input jack of your TV. Use the supplied Scart cable.
6) Plug in the TV and this unit.

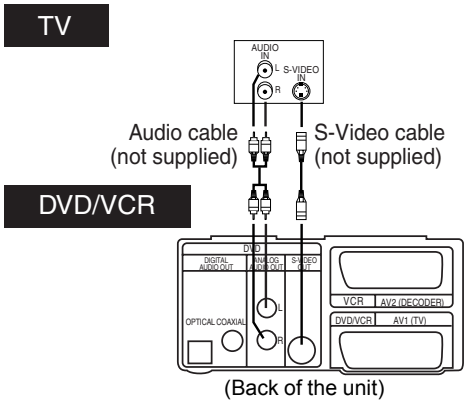
Note: • The TV must be connected to this unit through AV1 (TV) jack. A connection to AV2 (DECODER) jack will not function correctly.
• Playback picture from DVD and VCR cannot be delivered through the RF cable. The RF cable is only for sending the antenna signal to the TV.



If your TV has no scart input jack but has an S-VIDEO input jack,

1) Follow the steps **1)** to **4)** right under "Connecting to a TV".
2) Connect the S-VIDEO OUT jack on this unit to the S-VIDEO input jack on your TV.
3) Connect the ANALOG AUDIO OUT jacks of this unit to the analog audio input jacks of your TV.
4) Plug in the TV and this unit.

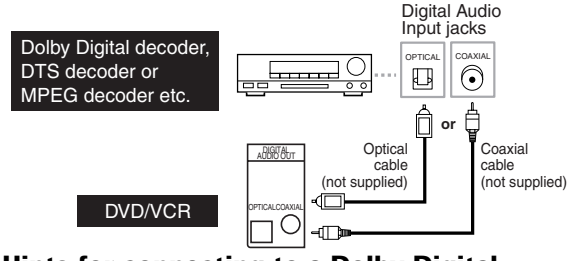
Note: • The S-VIDEO connection only supplies video (picture) in the DVD mode.
• Set "DOLBY DIGITAL" to "PCM" for the AUDIO setting in the setup mode.
Playing a DVD using incorrect settings may generate noise distortion and may also damage the speakers. (Refer to page 24.)



For Better Sound (for DVD Features)

These 2 connections are optional for better sound.

1) For clear digital sound quality, use the DIGITAL AUDIO OUT (either OPTICAL or COAXIAL) jack for the connection to your digital audio system.
• If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.



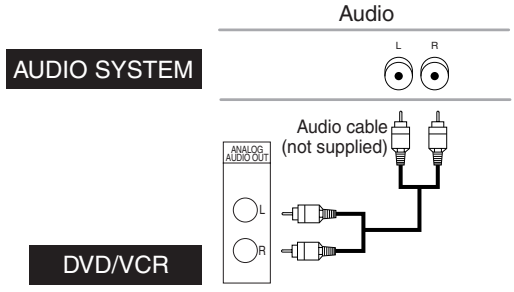
Hints for connecting to a Dolby Digital decoder, DTS decoder or MPEG decoder

- By connecting this unit to a Multi-channel Dolby Digital decoder, you can enjoy high-quality Multi-channel Dolby Digital surround sound as heard in the movie theaters.
- When this unit is connected to a DTS decoder, you can enjoy Multi-channel surround system which reproduces the original sound as truthfully as possible. Multi-channel surround system is developed by the Digital Theater System, Inc.
- A digital component with a built-in MPEG 2, Dolby Digital™ or DTS decoder allows you to enjoy the surround sound while producing the effecting of being in a movie theater or a concert hall.
- If output is Dolby Digital encoded audio, connect to a Dolby Digital decoder, and set "DOLBY DIGITAL" to "BITSTREAM" in the AUDIO menu. (Refer to page 24.)
- If output is DTS encoded audio, connect to a DTS decoder, and set "DTS" to "BITSTREAM" in the AUDIO menu. (Refer to page 24.)
- If output is MPEG encoded audio, connect to an MPEG decoder, and set "MPEG" to "BITSTREAM" in the AUDIO menu. (Refer to page 24.)

Hints for connecting to an MD deck or DAT deck

- The audio source on a disc in a Dolby Digital Multi-channel surround format cannot be recorded as digital sound by an MD or DAT deck.
- Unless connected to a Dolby Digital decoder, set "DOLBY DIGITAL" to "PCM" in the AUDIO menu. Playing a DVD using incorrect settings may generate noise distortion, and damage the speakers. (Refer to page 24.)
- Set "DOLBY DIGITAL" and "MPEG" to "PCM" and set "DTS" to "OFF" in the AUDIO menu for connecting to an MD deck or DAT deck. (Refer to page 24.)

2) For dynamic sound effects, use the ANALOG AUDIO OUT jacks for the connection to your audio system.



"DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

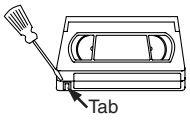
External Input Mode (for VCR Features)

Connect an external device (a decoder, a camcorder, etc.) to the AV2 (DECODER) jack. Press **0**, **0**, **2** with **the Number buttons**, so that "AV2" appears on the TV screen.
If you use the front AUDIO/VIDEO input jacks, press **0**, **0**, **3** with **the Number buttons**, so that "AV3" appears on the TV screen.
If you use the AV1 (TV) jack for connecting a device, press **0**, **0**, **1** with **the Number buttons**, so that "AV1" appears on the TV screen.

Video Cassette Tape

This unit will operate with any cassette that bears the VHS mark. For best results, we recommend the use of high-quality tapes. Do not use poor quality or damaged tapes.

- You can prevent accidental erasing of a recording by breaking off the erase-prevention tab on the back edge of the cassette.



- If you decide to record on the tape again, cover the hole with plastic tape.

TV Colour System

Different countries use different television colour systems. Tapes recorded in the PAL or NTSC system can be played back on this unit. Usually, the picture on the TV screen will be in black and white when you play back a tape that is recorded in a different colour system.

Tapes recorded in the NTSC system can be played back on this unit and a PAL system TV set. This feature is only available in the SP mode. When playing back such tapes, the picture may roll up or down, shrink vertically and black bars may appear both at the top and bottom of the screen. Adjust the vertical hold control on your TV, if the TV features this control.

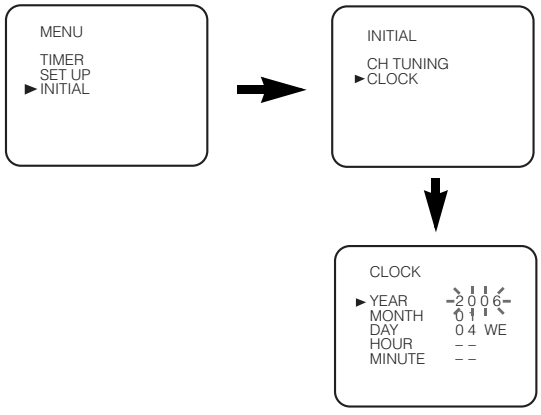
Setting the Clock

This unit incorporates a 24-hour clock. The clock must be set for the Timer Recording function to operate correctly.

- Use the remote control for this procedure.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "INITIAL", then press ►.
3) Press ▲ or ▼ to select "CLOCK", then press ►.
4) Press ▲ or ▼ until the relevant year appears, then press ►.
5) Press ▲ or ▼ until the relevant month appears, then press ►.
6) Press ▲ or ▼ until the relevant day appears, then press ►.
7) Press ▲ or ▼ until the relevant hour appears, then press ►.
8) Press ▲ or ▼ until the relevant minute appears.
9) Press **MENU** to start the clock.

Note:
- Press ◄ to go back to the item you want to correct during steps **5)** to **8)**.
- Although seconds are not displayed, they begin counting from 00 when you exit by pressing **MENU**. Use this feature to synchronize the clock with the correct time.
- If this unit is unplugged or if there is a power failure for more than 30 seconds, you may have to reset the clock.



Channel Presetting

Tuning of broadcast channels not already preset in the unit can be performed in two ways.

Automatic Channel Preset
- By "AUTOMATICALLY" tuning channels and placing them in sequential order in the unit's memory i.e. the first channel found will be memorized into the unit's channel position 1, the second channel found will be memorized into the unit's channel position 2 and so on.
- Execution of the "Automatic" channel presetting cancels all the preset channels. DO NOT use this feature if you intend to use some of the pre-tuned channels. Use the "Manual" channel presetting function to tune in the additional channels you require.

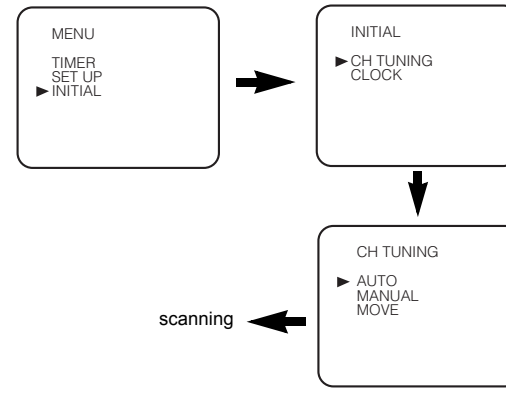
Manual Channel Preset
- Each channel is tuned manually and individually. Follow the steps laid out in the "Manual Channel Preset".

Automatic Channel Preset

You can programme the tuner to scan only the channels that you can receive in your area.

- Use the remote control for this procedure.

1) Turn on the TV and select the TV channel to the video channel on the TV.
2) Press **VCR**, then **MENU**.
3) Press ▲ or ▼ to select "INITIAL", then press ►.
4) Press ▲ or ▼ to select "CH TUNING", then press ►.
5) Press ▲ or ▼ to select "AUTO", then press ►.
- The tuner scans and memorizes all the active channels in your area. After scanning, the tuner stops on the lowest memorized channel.



To Select a Desired Channel

You can select a desired channel by using **CH.** (▲/▼), or directly pressing **the Number buttons** on the remote control.

- Enter a channel numbers as a two-digit number for the quickest results. For example, to select channel 6, press **0** and **6**. If you only press **6**, channel 6 will be selected after a brief delay.
- You can only select channels 01–99.

Manual Channel Preset

- Use the remote control for this procedure.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "INITIAL", then press ►.
3) Press ▲ or ▼ to select "CH TUNING", then press ►.
4) Press ▲ or ▼ to select "MANUAL", then press ►.
5) Press ▲ or ▼ to select "POSITION", then press ►.
- When a weak signal is received in Manual Tuning mode, you can change the background to solid blue or the static screen by pressing **C.RESET**.

6) Press **the Number buttons**, ▲ or ▼ to select your desired position number, then press ►.
- You can select position number 01-99.
- If "ON" appears on the right side of "SKIP", press ▲ or ▼ to point to "SKIP". Then, press ► to select "OFF".
- If you want to remove scrambled signals, press ▲ or ▼ repeatedly to point to "DECODER". Then, press ► to select "ON".

7) Press ▲ or ▼ to select "CHANNEL", then press ►.
8) Press ▲ or ▼ to start scanning.

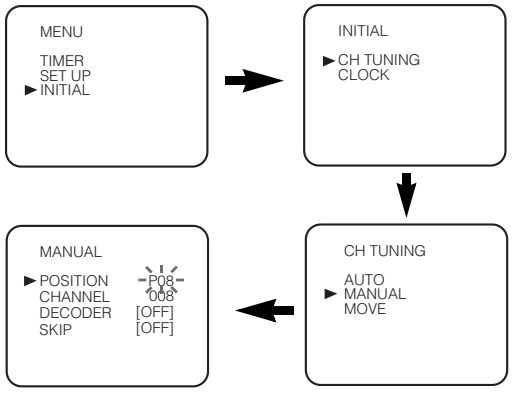
- The unit's tuner will begin to search up or down automatically. When a channel is found, the unit will stop searching and the picture will appear on the TV Screen.
- You can select desired channel number by using **the Number buttons**. You must refer to the following Channel Plan table and press three digits to select the channel number.
  (To select channel 24, press "**0**" button first and then press "**2**" and "**4**".)
- If this is the channel you want, press ►..

Channel Plan	
CH Indication	**TV Channel**
01 – 10	IRA – IRJ, GAP
21 – 69	E21 – E69
74 – 78	X, Y, Z, Z+1, Z+2
80 – 99, 100	S1 – S20, GAP
121 – 141	S21 – S41

This unit can receive Hyper and Oscar frequency bands.

9) Press **MENU** to exit.

Note: • To confirm that a channel has been added, press **CH.** (▲/▼).



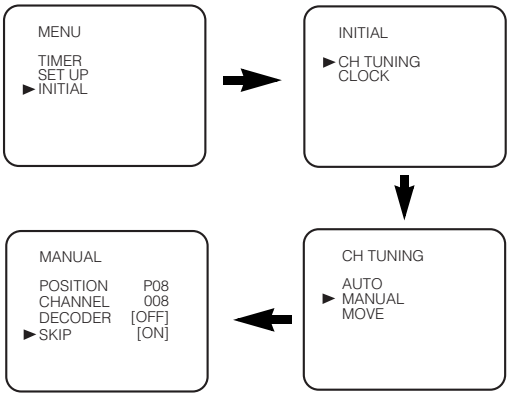
To Skip a Preset Channel

The channels you can no longer receive or seldom watch can be set to be skipped when you access channels by pressing **CH.** (▲/▼).

- Use the remote control for this procedure.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "INITIAL", then press ►.
3) Press ▲ or ▼ to select "CH TUNING", then press ►.
4) Press ▲ or ▼ to select "MANUAL", then press ►.
5) Press ▲ or ▼ to select "POSITION", then press ►.
6) Press **the Number buttons**, ▲ or ▼ to select relevant position number, then press ►.
7) Press ▲ or ▼ to select "SKIP", then press ► to select "ON".
  • To memorize the channel again, press ►. "ON" will change to "OFF".
8) Press **MENU** to exit.

Note: • To confirm that a channel has been deleted, press **CH.** (▲/▼).

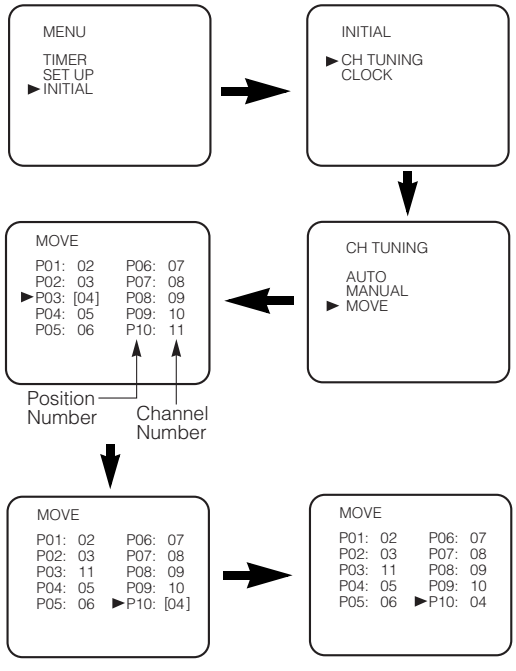


Channel Reprogramming

You can replace two channels.

- Use the remote control for this procedure.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "INITIAL", then press ►.
3) Press ▲ or ▼ to select "CH TUNING", then press ►.
4) Press ▲ or ▼ repeatedly to select "MOVE", then press ►.
5) Press ▲ or ▼ repeatedly to select the position number you want to change the channel, then press ►.
  • You cannot select a position number where "- - -" appears next to the number. This is because "SKIP" is set to "ON" for this position number.
  • When a weak signal is received in Channel Reprogramming mode, you can change the background to solid blue by pressing **C.RESET**.
  If you press the button again, the background will return to the static screen.
6) Press ▲ or ▼ repeatedly until the channel move to another position number, then press ►.
7) Press **MENU** to exit.



VCR Features

Ensure that all VCR setting begins in VCR mode by pressing **VCR**. (Make sure that the VCR OUTPUT indicator is lit.)

Playback

1) Turn on the TV and select the video channel on the TV.
2) Insert a pre-recorded tape.
- The unit will turn on automatically. If the erase-prevention tab has been removed, the unit will start playback automatically.
- If the unit's power was already on, press **VCR** to switch to VCR mode.

3) If playback does not start automatically, press **VCR**, then press **PLAY ►**.
<If a tape is already in the unit...>
- Using the buttons on the unit
  Just press **PLAY ►** on the unit. Power will automatically turn on and playback will start. (Direct Button Operation)
- Using the buttons on the remote control
  Press **STANDBY-ON** to turn on, and then press **PLAY ►**.

4) Press **STOP ■** to stop playback.

Tracking Adjustment

- Tracking adjustment will be activated automatically (Digital Tracking function) when you start playback.
- When playing pre-recorded tapes or tapes recorded on units other than your own, noise lines (black and white streaks) may appear on the playback picture. If this occurs, you can adjust the tracking control manually by pressing **CH.** (▲/▼) until the streaks disappear. To return to the DTR function, stop the tape once and start playback again.
- You can reduce the noise lines by pressing **CH.** (▲/▼) in Slow mode, too. Slow tracking adjustment is not set automatically.
- In the Still mode, press **SLOW**, and press **CH.** (▲/▼) until the streaks disappear. To return to the Still mode, press **PAUSE ❙❙** again.

Speed Search

1) Press ►► or ◄◄ during playback to view a videotape at a high speed in either a forward or reverse direction. In this mode, the sound will be muted.
2) Press the button again, the unit will now search in super high speed. (This function will not operate for a NTSC tape.)
3) Press **PLAY ►** to return to normal playback.

Still Picture

Press **PAUSE ❙❙** during playback to view a still picture on the TV screen.
- When the picture begins to vibrate vertically, stabilize the picture by pressing **CH.** (▲/▼) in the Still mode.
- After the unit has been in Still mode for 5 minutes, it will stop automatically to protect the tape and the video head.

<Note for "Speed Search" and "Still Picture">
- Usually there will be video "noise" lines (black and white streaks or dots) on the screen. This is normal.
  The still picture will, in addition to containing the "noise" lines, be black and white.
  This is not a fault of the unit but merely a by-product of the technology involved in producing a DVD/VCR with LP mode.

Slow Motion

- Press **SLOW** to reduce the playback speed. The unit mutes the sound during slow motion. You can control the speed by pressing ►► (faster) or ◄◄ (slower). Press **PLAY ►** to return to normal playback.
- If it is left in the Slow mode for more than 5 minutes, the unit will automatically switch to the Stop mode.

Auto Repeat Playback

The unit has an auto repeat function that allows you to repeat a tape indefinitely without touching **PLAY ►**.

- Use the remote control for this procedure.
- Insert a pre-recorded tape.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "SET UP", then press ►.
3) Press ▲ or ▼ to select "AUTO REPEAT".
4) Press ► so that "ON" appears next to "AUTO REPEAT" on the TV screen.
- When in Stop mode, Auto Repeat mode will start automatically.
- If the on-screen menu still remains, press **MENU** to exit, then press **PLAY ►**.

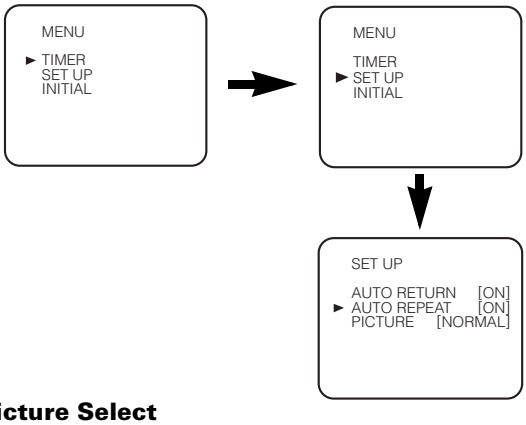
Note: • Once you select the Auto Repeat mode, it stays in effect even after you turn off the unit.

To Stop Playback

Press **STOP ■**.

To Exit the Auto Repeat Mode

Repeat steps **1)** to **3)**. Then, press ►.
"OFF" will appear next to "AUTO REPEAT" on the TV screen. Press **MENU** to exit.



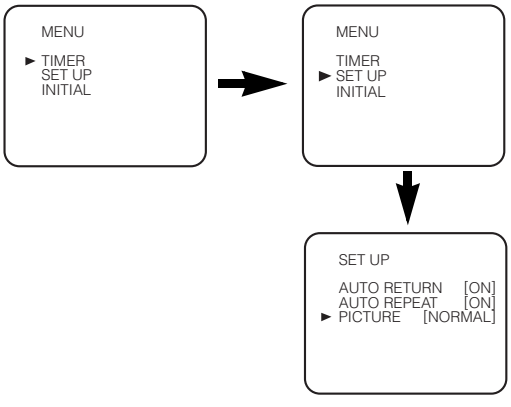
Picture Select

This function enables you to select the picture quality of a tape.

- Use the remote control for this procedure.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "SET UP", then press ►.
3) Press ▲ or ▼ to select "PICTURE".
4) Press ► until the desired mode (NORMAL, SOFT or SHARP) is indicated on the TV screen.
5) Press **MENU** to exit.

Note: • Once you select the Picture Select mode, it stays in effect even after you turn off the unit.



Auto Return

When timer recording is finished, the unit will automatically rewind the tape to the beginning where it started recording. If there are any remaining programmes including Daily, Everyday or Weekly, Auto Return will not operate.

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ repeatedly to point to "SET UP", then press ►.
3) Press ▲ or ▼ to point to "AUTO RETURN", then press ►.
   "ON" will appear next to "AUTO RETURN".
4) Press **MENU**.

Watch the Recorded Timer Programme

Press **T-SET** to turn on the unit and press **VCR**, then press **PLAY** ►.

Quick-Find

This function enables you to search and confirm the contents of the recorded programme(s) using the index mark.

- Use the remote control for this procedure.
- The tape must be fully rewound.

1) Press **VCR**, then **QUICK-FIND**.

To Skip to the Beginning of Next Programme

1) Press **QUICK-FIND**.

To View at Normal Speed

1) Press **PLAY** ►.
   • The Quick-Find is cancelled.

Note:
- This function will not operate in the Recording mode.
- When you want to cancel the Quick-Find while in progress, press **STOP** ■.
- When the end of a tape is reached during the Quick-Find, the tape will be automatically rewound to the beginning. After rewinding finishes, the unit will eject the tape.

Index Search

This function enables you to search the beginning of the desired programme recorded an index mark.

- The index mark will be made automatically when **REC/OTR** is pressed. It will also be marked at the starting point of Timer recording and OTR.
- The index mark is not recorded if **PAUSE** ❚❚ is pressed and released during recording.
- The time gap between index marks on the tape should be greater than 1 minute for SP recording and 2 minutes for LP recording.
- Use the remote control for this procedure.

1) Press **VCR**, then **SEARCH MODE**.
2) Press ▲ or ▼ repeatedly until the number of programmes that you want to skip appears.
3) Press ◄ or ► to start Index Search.
   • The unit begins rewinding or fast forwarding to the beginning of desired programme. When the preset programme is reached, the unit will start playback automatically.

Note:
- Index Search can be set up to 20.
- This function will not operate in the Recording mode.
- Operations must be followed up within 30 seconds from steps **2)** to **3)**, otherwise the Index Search mode will be cancelled.
- To exit the Index Search mode, press **MENU** in step **2)** or press **STOP** ■ after step **3)**.

Time Search

This feature allows you to go to a specific point on a tape by entering the exact amount of time you wish to skip in order to reach the point.
If a tape includes both programmes recorded in the PAL system and ones recorded in the NTSC system, this function may not be operated correctly.

- Use the remote control for this procedure.

1) Press **VCR**, then **SEARCH MODE** twice.
2) Press ▲ or ▼ repeatedly until the desired time appears.
3) Press ◄ or ► to start Time Search.
   • The unit begins rewinding or fast forwarding to the specified point. When 0:00 is reached, the unit will start playback automatically.

Note:
- Time Search can be set up to 9 hours 59 minutes (9:59).
- This function will not operate in the Recording mode.
- Operations must be followed up within 30 seconds from steps **2)** to **3)**, otherwise the Time Search mode will be cancelled.
- To exit the Time Search mode, press **MENU** in step **2)** or press **STOP** ■ after step **3)**.

Hi-Fi Stereo Sound System

This unit will record and playback Hi-Fi stereo sound. In addition it has an A2 stereo sound decoder.
This equipment will receive stereo and bilingual broadcasts and it is possible the several ways of recording and playing back the sound.

Selecting the Sound Mode

You can select each mode by pressing **AUDIO** on the remote control. Each mode is indicated on the TV screen as following.

- During reception of stereo broadcasts

Mode	Audio output	Display on the TV screen
Stereo	Stereo	STEREO
L	L audio from the both speakers	LEFT
R	R audio from the both speakers	RIGHT
Normal	Monaural	- None -

- During reception of bilingual broadcasts

Mode	Audio output	Display on the TV screen
Main	Main audio from the both speakers	MAIN
Sub	Sub audio from the both speakers	SUB
Main / Sub	• Main audio from the left speaker • Sub audio from the right speaker	MAIN + SUB

Note:
- If you play non-Hi-Fi tapes, the unit will play automatically in monaural even if you select any mode.
- If the stereo signal becomes weak, the broadcast is automatically recorded in monaural.

Recording

Viewing and Recording the Same Programme

1) Insert a cassette tape with its erase-prevention tab in place. (If necessary, rewind or fast forward the tape to the point at which you want to begin recording.) Press **VCR**.
2) Press **the Number buttons** or **CH.** (▲/▼) to select the channel to be recorded.
3) Press **SPEED/SYSTEM** to select the tape speed (SP/LP).
4) Press **REC/OTR** to begin recording.
   • The REC indicator on the front panel display comes on.
5) Press **STOP** ■ when recording is completed.

Two Different Tape Speeds

Before recording, select the tape speed: SP mode (Standard Play) or LP mode (Long Play). The table below shows the

maximum recording/playback time using E-60, E-120, E-180 or E-240 tapes in each mode.

Tape Type	Recording/Playback Time	
Tape Speed	SP Mode	LP Mode
E-60	1 hour	2 hours
E-120	2 hours	4 hours
E-180	3 hours	6 hours
E-240	4 hours	8 hours

Skipping Unwanted Programme Material During Recording

1) Press **PAUSE ❚❚** when you want to temporarily halt recording.
You can check the remaining pause time with ▮ marks on the TV screen. Each ▮ mark represents 1 minute. After 5 minutes, the unit will automatically switch to the Stop mode to prevent tape damage.
2) Press **PAUSE ❚❚** or **REC/OTR** to resume recording.

Recording One Programme While Viewing Another

You can record one programme while viewing another. To start recording, follow steps **1)** to **4)** under "Viewing and Recording the Same Programme". Then, set the TV to the channel you want to watch.

To Monitor the Progress of Your Recording

Select the video channel on the TV.

Assemble Function

You can record in continuation from previous programme on a pre-recorded tape.

1) Insert a pre-recorded tape. Press **PLAY ►** to start playback.
2) Press **PAUSE ❚❚** at the desired point on the tape.
3) Press **REC/OTR**. The unit will be in the Recording Pause mode.
4) Press **CH.** (▲/▼) to select the channel to be recorded.
5) Press **REC/OTR** or **PAUSE ❚❚**. The recording will begin.
6) Press **STOP ■** when recording is completed.

OTR (One Touch Recording)

This function enables you to set the duration of a recording simply by pressing **REC/OTR**.

1) Follow steps **1)** to **3)** in "Viewing and Recording the Same Programme".
2) Press **REC/OTR** repeatedly until the desired recording length appears in the upper left corner of the TV screen.

● → ● [0:30] → ●[1:00]... → ●[7:30] → ●[8:00]
(Normal recording) (OTR: 30 minutes)

Recording stops when 0:00 is reached.

- To check time remaining during an OTR, press **DISPLAY**.
- To change the recording length during an OTR, press **REC/OTR** repeatedly until the desired length appears.
- To stop an OTR before recording is finished, press **STOP ■**.
- To cancel the OTR but continue recording, press **REC/OTR** repeatedly until "●" appears without the recording length.

Timer Recording

You may programme the unit to start and end a recording while you are away. You can set 8 programmes to record on specific days, daily or weekly within a 1-year period.

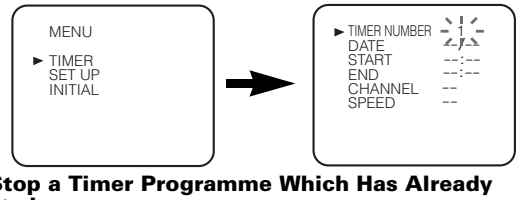
- Use the remote control for this procedure.
- Insert a cassette tape with its erase-prevention tab in place. (If necessary, rewind or fast forward the tape to the point at which you want to begin recording.)

1) Press **VCR**, then **MENU**.
2) Press ▲ or ▼ to select "TIMER", then press ►.

Note: • If you have not set the clock yet, "CLOCK" setting menu appears. If so, follow the steps outlined in the "Setting the Clock". (Refer to page 9.) Then, set the timer.

- When you press ► after pressing ▲ or ▼ during steps **3)** to **7)**, the input mode will move to the next item.
- If you do not press ► within 5 seconds of setting an item, the input mode will move to the next item.
- Press ◄ to go back to the previous item from the current setting during steps **4)** to **8)**. If ◄ is pressed when the TIMER NUMBER is flashing, the entire programme contents will be erased.

3) Programme number flashes. Press ▲ or ▼ repeatedly until the desired programme number appears. Then, press ►.
4) Select once, daily, everyday or weekly recording.
For once-only recording: Press ▲ or ▼ repeatedly until the relevant month appears, and then press ▲ or ▼ repeatedly until your desired day appears.
For daily recording: To record a TV programme at the same time on the same channel from Monday through Friday. While the month digit is flashing, press ▲ or ▼ repeatedly to select "MO-FR".
For everyday recording: To record a TV programme at the same time on the same channel everyday. While the month digit is flashing, press ▲ or ▼ repeatedly to select "MO-SU".
For weekly recording: To record a TV programme at the same time on the same channel every week. While the month digit is flashing, press ▲ or ▼ repeatedly to select "W-MO" (example: every monday).
5) Press ▲ or ▼ repeatedly until the relevant start hour appears. Next, enter the minute digit.
6) Press ▲ or ▼ repeatedly until the relevant end hour appears. Next, enter the minute digit.
7) Press ▲ or ▼ repeatedly until the relevant channel number appears.
8) Press ▲ or ▼ repeatedly until the desired tape speed appears.
9) Press ►. Programme is now completed.
• To set another timer programme, repeat steps **3)** to **9)**.
10) Press **MENU** to exit.
11) Press **T-SET** to activate a timer recording.
• If the unit switches to the DVD mode after pressing **T-SET**, the ◷ indicator will not appear. The ◷ indicator will appear when the unit is turned off by pressing **STANDBY-ON**.
• If the unit is turned off after pressing **T-SET**, the ◷ indicator will appear.



To Stop a Timer Programme Which Has Already Started

Press **STOP/EJECT** on the unit.

Note: • **STOP ■** on the remote control will not function in the Timer Recording mode.

To Correct Timer Programmes

If the unit is already in timer standby mode, press **STOP/EJECT** on the front panel or **T-SET** on the remote control to exit from the standby mode.

1) Repeat steps **1)** to **3)** in the "Timer Recording".

2) Select the programme number you want to change using ◄ or ►.
3) Enter the correct numbers using ▲ or ▼, then press ►.
4) Press **MENU** to exit.
5) Press **T-SET** to return to timer standby mode.

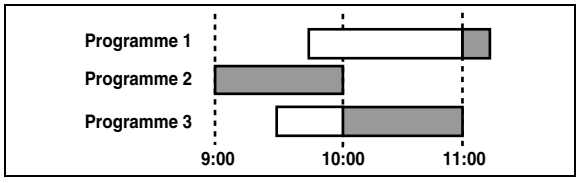
To Cancel or Check the Start/End Time

If the unit is already in timer standby mode, press **STOP/EJECT** on the front panel or **T-SET** on the remote control to exit from the standby mode.

1) Repeat steps **1)** to **2)** in the "Timer Recording".
2) Select the programme number you want to check using ▲ or ▼. The details of selected programme appears on the TV screen. You may cancel the entire programme by pressing ◄.
3) Press **MENU** to exit.

Avoid Overlap of TIMER Programmes...

A timer programme does not work while another programme is under execution.



Hints for OTR and Timer Recording

- Press **VCR** on the remote control before you set Timer Recording. Make sure the remote control is in the VCR mode, then press **T-SET**.
- If a tape is not in the unit or does not have the erase-prevention tab, the ◷ indicator flashes and Timer Recording cannot be performed. Please insert a recordable tape.
- When Timer Recordings are set, the ◷ indicator will appear. To use the VCR as usual until the time for the recording, press **T-SET** so that the ◷ indicator disappears. Select either VCR or DVD mode, then continue with the other features as described in this manual.

After an OTR and a Timer Recording has been set, this unit operates as follows:

- If a tape runs out before an OTR or a Timer Recording is finished, the unit ejects the tape and switches to the DVD mode automatically. If the DVD power is off, the unit does not switch to the DVD mode but goes into the timer standby mode. Press **T-SET** on the remote control or **STOP/EJECT** on the unit, then press **VCR** to activate the VCR function again.
- Once the unit turns to the timer standby mode, no VCR functions are available until **T-SET** is pressed. (**OUTPUT** on the front panel and **VCR** on the remote control will not function.)
- To cancel the timer standby mode, press **T-SET** on the remote control or **STOP/EJECT** on the unit, then press **VCR** to activate the VCR function again.
- The mode of the unit and the remote control may differ (VCR mode or DVD mode) when you set Timer Recording or after you cancelled Timer Recording.
- Press **VCR** or **DVD** on the remote control to select your desired mode before you operate.

When an OTR or a Timer Recording is completed...

- If Auto Power Off for DVD has been activated and there are Timer Recordings on standby, the unit turns off automatically, and the ◷ indicator on the front panel display lights up to indicate the unit is in the timer standby mode.
- The ◷ indicator on the front panel display flashes if there are no more Timer Recordings on standby.
- If Auto Power Off for DVD has NOT been activated, the unit switches to the DVD mode and all the VCR function will be unavailable. The ◷ indicator will not appear as long as the DVD is in use. All the DVD functions are available during OTR, timer standby mode and Timer Recording.

If you want to use the unit during a timer recording or while the ◷ indicator is on or flashing.

- Press **STANDBY-ON** to turn on the unit. Press **DVD** on the remote control to choose DVD mode, then continue with the other DVD features as described in this manual. You don't need to set the TIMER off to use the unit.

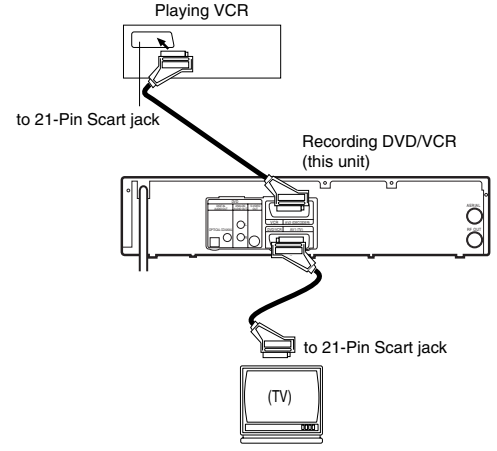
Note (for Timer Recording) :

- If there is a power failure or the unit is unplugged for more than 30 seconds, clock and all timer settings will be lost.

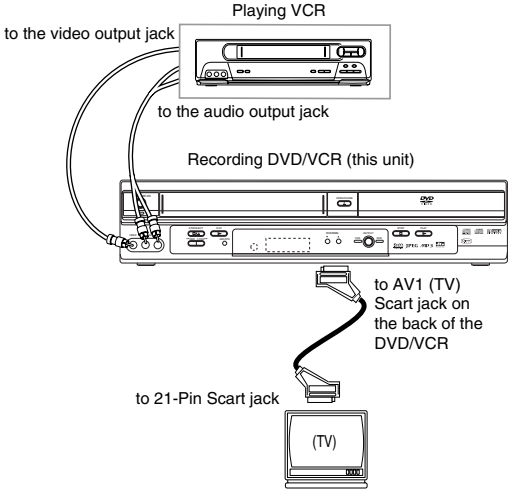
Copying a Video Tape

You can make copies of videotapes made by friends or relatives for your own enjoyment.
Connect the recording DVD/VCR (this unit), playing VCR (another VCR) and your TV as outline in the following diagrams.

Using scart jacks



Using AV front terminals



1) Insert a pre-recorded videocassette into the playing VCR.

2) Insert video cassette tape with its erase-prevention tab in place into the cassette compartment of the recording unit.
3) Press **SPEED/SYSTEM** to select the desired recording speed (SP/LP).
4) Select "AV2" or "AV3" position on the recording unit. See "External Input Mode (for VCR Features)". (Refer to page 8.)
5) Press **REC/OTR** on the recording unit.
6) Begin playback of the tape in the playing VCR.
7) To stop recording, press **STOP/EJECT** on the recording unit, then stop playback of the tape in the playing VCR.

Note: • For best results during dubbing, use the unit's front panel controls whenever possible. The remote control might affect the playing VCR's operation.
• If video or colour fades in and out, you may be copying a copy guarded video tape.
• Unauthorised recording of copyrighted materials may infringe on the rights of copyright owners, violate copyright laws and may not record clearly.

Recording from DVD to VCR

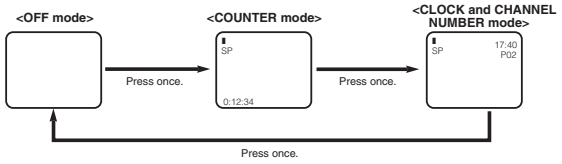
You can copy a DVD to a videotape. This will be possible only if the DVD is not copy protected.

1) To activate DVD function, press **DVD**.
2) Insert an uncopyrighted DVD, then press **PAUSE ❚❚** at the point where you want to start recording.
3) Press **VCR**, then insert a tape with its erase-prevention tab in place. Make sure the VCR is in Stop mode after you find your recording point.
4) Press **SPEED/SYSTEM** to choose your recording speed. "SP" or "LP" appears on the front panel display.
5) Press **0**, **0**, **4** with **the Number buttons**, then "disc" briefly appears on the front panel display.
6) Press **REC/OTR**.
7) Press **DVD**, then press **PLAY ►**.
8) To stop recording, press **VCR**, then **STOP ■**.

Status Display

To check the Counter, or Clock & Channel number, press **DISPLAY**. Each time you press **DISPLAY**, TV screen will change as illustrated:

When you select the channel using **the Number buttons**, select the desired channel (position number).



Note: • If the on screen display or indicators on the front panel show an abnormal reading or no reading, unplug this unit for 30 seconds, then replug it again.
Please note that clock and timer settings will be cleared after disconnection.

Real Time Tape Counter

- This counter shows the elapsed recording or playback time in hours, minutes, and seconds on screen. (Nothing is shown in the case of blank portion.)
- The front panel display shows elapsed time in hours and minutes.
- The " – " indication will appear when the tape is rewound further than the tape counter position "0:00:00".

Automatic Operations

Automatic Rewind, Eject

When the end of a tape is reached during recording, playback or fast-forward, the tape will be automatically rewound to the beginning. After that, the unit will eject the tape.

- The unit will not rewind the tape automatically during timer recording or One Touch Recording.

Tape Eject

A tape can be ejected with the unit power on or off (but the unit must be plugged in).

- If a timer recording is set, press **STOP/EJECT** twice to eject a tape.

DVD Operation

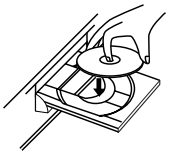
Basic Playback

DVD-V | **CD** | **MP3** | **JPEG** | **VCD** | **DivX®**

Getting started

- Turn on the power of the TV, amplifier and any other components which are connected to this unit.
- Make sure the TV and audio receiver (commercially available) are set to the correct channel.
- Make sure that the DVD OUTPUT indicator is lit. If not, press **DVD** to switch to DVD mode.

1) Press **STANDBY-ON**.
2) Press **OPEN/CLOSE** to open disc loading tray.
3) Place the chosen disc on the tray, with the label facing up.



4) Press **PLAY ►**.
• The tray will close automatically, and playback will then start from the first chapter or track of the disc.
• When you play back a DVD with a title menu recorded, it may appear on the screen. In this case, refer to "Title Menu" on page 16.
5) Press **STOP ■** to stop playback.

Note: • A "prohibited icon" may appear at the top-right on the TV screen during operation, warning that a prohibited operation has been encountered by this unit or the disc.

• Some DVDs may be played from title 2 or 3 due to specific programmes.
• During the playback of two layered disc, pictures may stop for a moment. This happens while the 1st layer is being switched to the 2nd layer. This is not a malfunction.
• DVDs recorded with the NTSC system can be viewed on PAL, NTSC or Multi system TV. (Refer to page 23.)

- Depending on the TV, when playing back a NTSC DVD on a PAL TV, the picture may roll up or down, shrink vertically and black bars may appear at the both top and bottom of the screen.
- It may take a time to deliver the picture or the sound. This is not a malfunction.
- You can change the on-screen language in "PLAYER MENU" setting. (Refer to page 23.)

General Features

DVDs may contain menus to navigate the disc and access special features. Enter the appropriate **Number buttons** or press **Cursor ▲/▼/◄/►** to highlight your selection in the DVD menu and press **ENTER** to confirm.

Note: • Unless stated, all operations described are based on remote control use. Some operations can be carried out with the buttons on the front panel.

Disc Menus

DVD-V

1) Press **MENU**.
•The DVD menu will appear.
2) If the feature is not available, ⃠ symbol may appear on the TV screen.
3) If disc menu is available on the disc, audio languages, subtitle options, chapters for the title and other options will appear for selection.
4) Press **Cursor ▲/▼/◄/►** to select an item, and press **ENTER** to confirm selection.

Title Menu

DVD-V

1) Press **TOP MENU**.
•The title menu will appear.
2) If the feature is not available, ⃠ symbol may appear on the TV screen.
3) Press **Cursor ▲/▼/◄/►** to select an item, and press **ENTER** to confirm selection.
•Playback will begin at the selected title.

VCD

1) Insert a Video CD.
•The title menu will appear.
2) Press **the Number buttons** to select an item.
•Playback will begin at the selected title.

Calling up a Menu Screen During Playback

DVD-V

- Press **MENU** to call up the DVD menu.
- Press **TOP MENU** to call up the title menu.

Note: • Contents of menus and corresponding menu operations may vary between discs. Refer to the manual accompanying the disc for details.

About the PBC Function of Video CD

VCD

PBC stands for Play Back Control. You can play interactive software using a menu screens.
Refer to instructions of Video CD.

- This unit conforms to ver.1.1 and ver.2.0 of Video CD standard, with PBC function.
  Ver.1.1 (without PBC function): You can enjoy playback picture as well as Music CD.
  Ver.2.0 (with PBC function): When using a Video CD with PBC function, "Pbc" appears on the front panel display.
- Video CD with PBC function has its original menu. Menu operation may vary depending on the disc. Refer to the manual included in the disc for details.
- "Pbc" appears on the front panel display when a Video CD with PBC function is loaded.

Cancelling and Calling Back PBC Function

When playing Video CDs with PBC function, some operations (e.g. select and repeat tracks, resume) cannot be performed unless the PBC function is cancelled temporarily.

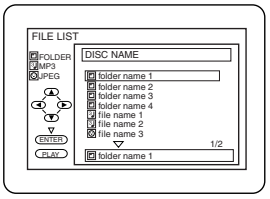
1) Insert a Video CD.
•Title menu will appear on the display.
2) Press **STOP ■**.
3) Press **the Number buttons** to enter the desired track number.
•PBC function is now cancelled and the playback of the Video CD will start.
4) To call back PBC function, press **STOP ■** twice, and then press **PLAY ►**.

MP3 / JPEG / DivX® Playback

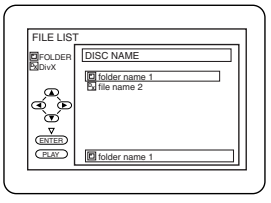
MP3 **JPEG** **DivX®**

Insert an MP3/JPEG/DivX®-format disc, then the FILE LIST will automatically appear on the TV screen, and the number of tracks is displayed on the front panel.

1) Press ▲ or ▼ to select the desired group or track.



Example: MP3/JPEG



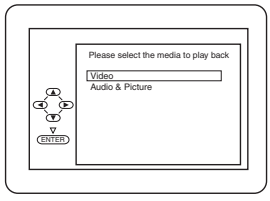
Example: DivX®

- •If a group is selected, press ► or **ENTER** to go on to the track selection screen. Press ▲ or ▼ to choose a track, then press **PLAY ►** or **ENTER**.
- •If a track is selected, press **PLAY ►** or **ENTER** to start playing tracks. Playback will start from the selected track and will play one after another.
- •Press ◄ to go back to the previous hierarchy (except for the top hierarchy).
- •Press **TOP MENU** to return to the first item.

2) Press **STOP ■** to stop playback.

Note: • Folders are known as Groups, and files are known as Tracks.
- Folders are accompanied by icon.
- MP3 files are accompanied by icon.
- JPEG files are accompanied by icon.
- DivX® files are accompanied by icon.
- A maximum of 255 folders can be recognized.
- A maximum of 999 files can be recognized.
- Up to 8 hierarchies can be recognized.
- The name of group and track can be displayed in up to 25 characters. Unrecognizable characters will be replaced with asterisks. The ninth and deeper hierarchies cannot be displayed.
- Unplayable groups and tracks may be displayed depending on the recording conditions.

- For MP3 file recorded in Variable Bit Rate(VBR), the unit may not display the actual elapsed time.
- Progressive JPEGs (JPEG files saved in the progressive format) can not be played back on this unit.
- High resolution JPEG files take longer to be displayed.
- When playing back the files recorded in high bit rates, the images can be interrupted in some occasions.
- Although DivX® logo has been obtained for this player, it may not be able to play back some data, depending on the disc characteristics, bit rates, or audio format settings, etc.
- Use the software recognized by DivX®, Inc. when you make DivX® files.
- When using tools or utilities to make up DivX® files, read their instruction manual beforehand.
- A DivX® file whose file size exceeds 2GB cannot be played back.
- If a large-sized DivX® file is selected, it may take a while to start the playback (over 20 seconds sometimes).
- If DivX® files wrote on CD discs cannot be played back, rewrite them on a DVD disc and try to play back.
- For more information for DivX®, please visit http://www.divx.com.
- If you insert a CD-R/RW with DivX® files that are mixed with MP3 or JPEG files, the Playback Media Selection screen will be displayed. Please select "Video" and proceed to step **1)**.

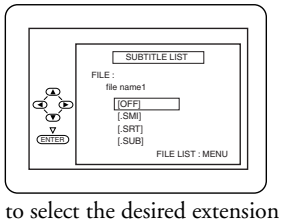


- Press **TOP MENU** to call up the Playback Media Selection screen in Stop mode.
- If you select "Audio & Picture", instead of "Video" on the Playback Media Selection screen, the DVD player can play back MP3/JPEG files.

DivX® Subtitle

The subtitle created by the user can be displayed during DivX® playback.

1) After select the DivX® file, the SUBTITLE LIST will appear when the "DivX SUBTITLE" setting is except "OFF".



2) Press ▲ or ▼ to select the desired extension you want to display, then press **ENTER**. DivX® with the subtitle starts playback. The subtitle cannot be displayed when the setting is "OFF".
- If there is more than two extension, the extension selection appears in the SUBTITLE LIST.

Note:
- DivX® subtitle can only be displayed according to the same name with an extension of the DivX® file name.
- Files whose extension is other than ".SMI", ".smi", ".SRT", ".srt", ".SUB" and ".sub" will not be listed in the SUBTITLE LIST.
- This unit cannot be recognised if the DivX® file and its subtitle file are not in the one folder.
- The subtitle may not be displayed if the file size is too large.
- To change the subtitle, refer to "Subtitle Language" on page 19 if multiple subtitles are available.
- The subtitle cannot display if the on-screen information is displayed.
- If the DivX® subtitle setting is "OFF", the subtitle will not be displayed even if you select a subtitle file. (Refer to "DivX SUBTITLE" on page 23.)
- Unrecognisable characters will be replaced with asterisks.

This unit recommends the files recorded under the following circumstances:

[MP3]
- Sampling frequency : 44.1 kHz or 48 kHz
- Constant Bit Rate : 32 kbps ~ 320 kbps

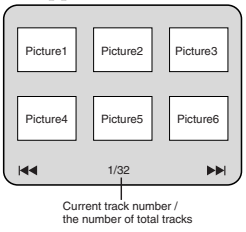
[JPEG] Size of picture
- Upper limit : 6,300 x 5,100 dots
- Lower limit : 32 x 32 dots

[DivX®]
- Official DivX Certified™ product
- Plays DivX®6, DivX®5, DivX®4, DivX®3 and DivX®VOD video content (in compliance with DivX Certified™ technical requirements)
- Playable Codec of AVI files : DivX®3.1.1, DivX®4.x, DivX®5.2.1, DivX®6.0
- Maximum size of image : 720 x 480 @30 fps, 720 x 576 @25 fps
- Sampling frequency of audio : 8 kHz - 48 kHz
- Audio type : MPEG1 audio layer 3 (MP3), MPEG1 audio layer 2, Dolby Digital

Kodak Picture CD

The unit can also run JPEG files stored on Kodak Picture CDs. The Picture CD is a service to convert photographs taken by a conventional film camera into digital data and write the data on a CD. You can enjoy picture images on the TV set by playing back the Picture CDs.
For details of Kodak Picture CD, contact a shop that deals with developing service of Kodak Inc.

1) Insert a Kodak Picture CD, then Kodak Picture CD menu will automatically appear on the TV screen.



- If all menu items cannot be displayed in the screen scope, "▶▶|" appears at the right bottom of the screen, indicating that you can view remaining items on the next page. "|◀◀" appears at the left bottom of the screen, indicating that you can view other items on the previous page. The track number of the currently highlighted item and the total tracks are shown at the centre bottom of the screen.
- If "▶▶|" is shown at the right bottom, use **SKIP ▶▶|** to view the next page. If "|◀◀" is shown at the left bottom, use **SKIP |◀◀** to view the previous page.

• It may take some time until all menu items are displayed on the menu screen.

2) Press **Cursor ▲ / ▼ / ◄ / ►** to select a desired track to be played, then press **PLAY ►** or **ENTER**.
- If a Kodak Picture CD file is selected, an image will be played back from the selected track and go to the next one in turn.

3) Press **STOP ■** to stop playback.

Notes on JPEG and Kodak Picture CD

- A track is displayed for 5 seconds or 10 seconds and then the next track is displayed. (Refer to page 24.)
- During JPEG or Kodak Picture CD playback, press **ANGLE** to rotate a picture 90 degrees clockwise.

Dual Playback

MP3 **JPEG**

1) Press **MENU** during MP3/JPEG playback.
- The FILE LIST will appear.

2) Press ▲ or ▼ to select a desired JPEG file or MP3 track from the FILE LIST, and then press **PLAY ►** or **ENTER**.
- Dual Playback will begin. Refer to page 24 on how to set the Dual Playback "ON" or "OFF".

3) Press **STOP ■** to stop playback.

Note:
- Zooming or rotating a JPEG file during Dual Playback may cause an intermittent sound.
- Dual Playback may not function properly if MP3 and JPEG files on the disc interfere each other due to the difference in their data size.

Slide Show Mode

JPEG

You can switch to the slide show mode during playback.

1) During playback, press **MODE** once.
- The slide show mode screen will appear.
- The slide show mode cannot be switched when playback is stopped, or from the FILE LIST or the Picture CD menu screen.

2) Press **ENTER**.
- The slide show mode will change.

CUT IN/OUT : The entire image appears at a time.
FADE IN/OUT : The image appears gradually and then disappears.

3) Press **MODE** to exit.

Adjustment of Picture Size

JPEG

Depending on the TV connected to this unit, the overall picture cannot be displayed and the edge of the picture can be cut out. In this case, you can adjust the size of the JPEG playback image on screen.

1) During playback, press **MODE** twice.
- The setting screen for the picture size adjustment will appear.
- The setting screen will not be displayed while in the Stop mode or from the FILE LIST.

2) Press **ENTER**.

NORMAL : to display the image at 100% of the picture size.
SMALL : to display the image at 95% of the picture size.
- The default setting is "NORMAL".
- This feature may have no effect on some files (e.g. Files with a small picture size).

3) Press **MODE** to exit.

Resume

DVD-V **CD** **MP3** **JPEG** **VCD** **DivX®**

1) During playback, press **STOP ■**.
- Resume message will appear on the TV screen.

2) Press **PLAY ►**.
- Playback will resume from the point at which playback was stopped.
- To cancel resume, press **STOP ■** twice. For MP3 and JPEG files, the top hierarchy of FILE LIST will automatically appear on the TV screen.

Note:
- For MP3 and JPEG files, playback will resume from the beginning of the current track.
- The resume information stays on even when the power is turned off.
- Some Video CDs with the PBC function resume playback from the beginning of the track.

Pause

DVD-V **CD** **MP3** **JPEG** **VCD** **DivX®**

1) During playback, press **PAUSE ❚❚**.
- Playback will be paused and sound will be muted.
- Press **PAUSE ❚❚** once during Dual Playback to pause a JPEG file only. Press **PAUSE ❚❚** one more time to pause an MP3 track.

2) To continue playback, press **PLAY ►**.

Note:
- On DVDs, set "STILL MODE" to "FIELD" in the DISPLAY menu if pictures in the pause mode are blurred. (Refer to page 23.)

Step by Step Playback

DVD-V **VCD** **DivX®**

1) During playback, press **PAUSE ❚❚**.
- Playback will be paused and sound will be muted.

2) The disc advances by one frame each time **PAUSE ❚❚** is pressed.

3) To exit step by step playback, press **PLAY ►**.

Note:
- On DVDs, set "STILL MODE" to "FIELD" in the DISPLAY menu if pictures during step by step playback are blurred. (Refer to page 23.)

x1.3 and x0.8 Rapid Play with Voice

DVD-V

Available only on discs recorded in the Dolby Digital format, x1.3 and x0.8 Rapid Play with Voice plays back in slightly faster/slower speed while keeping the sound quality as in the normal playback.

1) During playback, press **MODE** once.
- The current setting appears.

2) Press ◄ or ► to switch among "♪♪" (x1.3), "♪" (x0.8) and "OFF".

♪ : Plays back approximately at 0.8 times of normal playback.
♪♪ : Plays back approximately at 1.3 times of normal playback.

3) To return to normal playback, press **PLAY ►**.

Note:
- Audio language setting cannot be made during x1.3 and x0.8 Rapid Play with Voice.
- Virtual Surround setting cannot be changed while using this mode.
- Virtual Surround does not function while using this mode.
- This feature may not work at some point in a disc.
- When using digital audio connection, the PCM sound will be output.

Fast Forward / Reverse Search

DVD-V | CD | MP3 | VCD | DivX®

1) During playback, press ►► or ◄◄ repeatedly to select the required forward or reverse speed.
   • For DVDs and Video CDs, fast forward or reverse search speed is different depending on the disc.
   • For DVDs, approximate speed is 1(x2), 2(x8), 3(x20), 4(x50) and 5(x100).
   • For MP3, Audio CDs, Video CDs and DivX®, approximate speed is 1(x2), 2(x8) and 3(x30).
2) To return to normal playback, press **PLAY** ►.

Note: • On DVDs, set "STILL MODE" to "FIELD" in the DISPLAY menu if pictures during fast forward and reverse search are blurred. (Refer to page 23.)
• If you press ►► or ◄◄ during Dual Playback, a JPEG file will be paused.
• Picture quality of DivX® files in fast reverse is lower than that in fast forward.
• For some DivX® files, Fast Forward/Reverse Search may not function.

Slow Forward / Reverse Search

DVD-V | VCD | DivX®

1) During playback, press **PAUSE** ❚❚.
2) Press ►► or ◄◄.
   • Slow motion playback will begin and sound will be muted.
3) Press ►► or ◄◄ repeatedly to select the required speed.
   • Slow forward or reverse speed varies with the disc. Approximate speed is 1(1/16), 2(1/8) and 3(1/2).
4) To return to normal playback, press **PLAY** ►.

Note: • Slow Reverse is not available on Video CDs and discs with DivX® files.
• On DVDs, set "STILL MODE" to "FIELD" in the DISPLAY menu if pictures in the slow motion playback mode are blurred. (Refer to page 23.)

Zoom

DVD-V | JPEG | VCD | DivX®

The Zoom function allows you to enlarge the video image and to pan through the enlarged image.

1) During playback, press **ZOOM**.
   • Playback will continue.
2) Press **ZOOM** repeatedly to select the required zoom factor: "x2", "x4" or "OFF".
3) Press **Cursor** ▲/▼/◄/► to slide the zoomed picture across the screen.
   • During zoomed playback, the position guide box appears at the bottom-right on the TV screen. The position of the blue box inside the gray box indicates the position of the zoomed image within the overall picture. To remove the box or show it, press **ENTER**.
4) To exit Zoom mode, press **ZOOM** to set to "OFF".

Note: • Zooming function does not work while the disc menu is shown.
• x4 zoom is not available on some discs.
• Only x2 zoom is available on JPEG, Video CDs and DivX®.
• You cannot slide the zoomed picture on some JPEG files.
• Position guide is not available for JPEG playback.

Audio Language

DVD-V | DivX®

This unit allows you to change audio languages during DVD disc (if multi language available) playback.

1) During playback, press **AUDIO**.
2) Press **AUDIO** repeatedly to select your desired language.

Note: • The sound mode cannot be changed during playback of discs not recorded in double sound.
• Audio language setting cannot be made during x1.3 and x0.8 Rapid Play with Voice. (Refer to "x1.3 and x0.8 Rapid Play with Voice".)
• If your language is not shown after pressing **AUDIO** several times, the disc may not have that language. However, some discs allow you to change audio language setting in the disc menu. (Operation varies with the disc, so refer to the manual included in the disc.)
• If you choose a language that has a 3-letter language code, the code will be displayed every time you change the Audio language setting. If you choose any other languages, "---" will be displayed instead. (Refer to page 25.)
• For discs with DivX® files, the screen only displays MP3 audio. Other audio sounds will be displayed with "---".

Subtitle Language

DVD-V | DivX®

This unit allows you to change languages for subtitle during DVD disc (if available) playback.

1) During playback, press **SUBTITLE**.
2) Press **SUBTITLE** repeatedly to select your desired subtitle language.
   • The selected language will be displayed on the display bar at the top of the screen.
3) To turn off subtitles, press **SUBTITLE** repeatedly until "OFF" appears.

Note: • If your language is not shown after pressing **SUBTITLE** several times, the disc may not have that language. However, some discs allow you to change subtitle language setting in the disc menu. (Operation varies with the disc, so refer to the manual included in the disc.)
• When "NOT AVAILABLE" appears on the TV screen, it means no subtitle is recorded on the scene.
• If you choose a language that has a 3-letter language code, the code will be displayed every time you change the Subtitle language setting. If you choose any other languages, "---" will be displayed instead. (Refer to page 25.)
• For discs with DivX® files, the screen only displays the number of subtitle languages.

Camera Angle

DVD-V

Some DVD discs contain scenes which have been shot simultaneously from various angles. You can change the camera angle when the ( ) icon appears on the screen.

1) During playback, press **ANGLE**.
   • The selected angle will be displayed on the display bar at the top of the screen.
2) Press **ANGLE** repeatedly to select your desired angle.

Note: • If the ANGLE ICON setting is "OFF" in the OTHERS menu, the ( ) icon will not appear.

Stereo Sound Mode

CD | VCD

1) During playback, press **AUDIO** repeatedly to select "STEREO", "L-ch" or "R-ch".

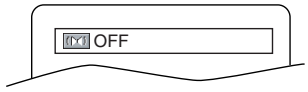
STEREO : Both right and left channels are active (stereo).
L-ch : Only left channel is active.
R-ch : Only right channel is active.

Virtual Surround

DVD-V | CD | MP3 | VCD

You can enjoy stereophonic virtual surround effects on your existing stereo system.

1) During playback, press **MODE** repeatedly.
- For MP3, Audio CDs and Video CDs, press **MODE** once.



2) Press **ENTER** to change a value to "1" (Natural effect), "2" (Emphasized effect) or "OFF" (original sound).

3) Press **MODE** or **RETURN** to exit.

Note:
- Virtual Surround will not be effective if the sound mode is set to something other than "STEREO" (for Audio CDs and Video CDs only). (Refer to "Stereo Sound Mode" on page 19.)
- Turn down the level or turn it "OFF" if the sound is distorted.
- The setting will be saved even if this unit is turned off.
- This function cannot be used during x1.3 and x0.8 Rapid Play with Voice. (Refer to page 18.)

Track Search

CD | MP3 | JPEG | VCD | DivX®

There are three ways to begin the playback of a specific track on a disc.

Using the Number buttons

1) Press **the Number buttons** to enter the desired track number.
- Playback will start at the selected track.
- For any discs, to play a single-digit track, press the number directly (e.g. for track 3, press **3**).
- For the disc with less than 100 tracks, to play a double-digit track, press **+10**, then the number (e.g. for track 26, press **+10**, **2**, **6**).
- For the disc with more than 100 tracks, to play a double-digit track, press **+10**, **0**, then the number of the track. (e.g. for track 26, press **+10**, **0**, **2**, **6**). To play a triple-digit track, press **+10**, then the number of the track (e.g. for track 126, press **+10**, **1**, **2**, **6**).

Using SEARCH MODE

1) Press **SEARCH MODE**.
- The Track Search display appears.

2) Within 30 seconds, select a desired track number using **the Number buttons**.
- Playback will start at the selected track.
- For the disc with more than 10 but less than 100 tracks, to play a single-digit track, press **0** first, then the number of the track (e.g. for track 3, press **0**, **3**).
- For the disc with more than 100 tracks, to play a single or a double-digit track, press **0** first, then the number of the track (e.g. for track 3, press **0**, **0**, **3** and for track 26, press **0**, **2**, **6**).
- In any other cases, just press the number of the track.

Using SKIP |◀◀ ▶▶|

During playback, press **SKIP** ▶▶| to move to the next track. Press it repeatedly to skip subsequent tracks.
Press **SKIP** |◀◀ to go back to the beginning of the current track. Press it repeatedly to go back to the previous tracks.
- Track number will appear briefly on the front panel display.
- If **SKIP** |◀◀ ▶▶| are pressed while the playback is paused, the playback will be paused again after skipping to the next track.
- During Dual Playback, using **SKIP** |◀◀ ▶▶| will only affect MP3 tracks.
- To skip JPEG files, use ◀ or ▶. If the "SLIDE SHOW" is set to "MUSIC", **SKIP** |◀◀ ▶▶| are available for both MP3 and JPEG files.

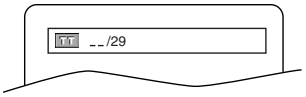
Note:
- **SKIP** |◀◀ ▶▶| are not available when playback is stopped.

Chapter / Title Search

DVD-V

Using SEARCH MODE

1) During playback, press **SEARCH MODE** once for the Chapter Search, twice for the Title Search.



2) Enter the desired chapter/title number using **the Number buttons**.

Using the Number buttons

1) During playback, press **the Number buttons** to enter the desired chapter number.
- Playback will start at the selected chapter.
- For single digit chapters (1-9), press a single number (e.g. to play chapter 3, press **3**).
- To play chapter 26, press **+10**, **2**, **6**.

Note:
- Depending on the disc being played, using **the Number buttons** cannot be performed.

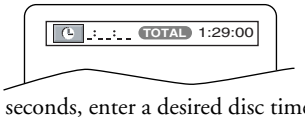
Using SKIP |◀◀ ▶▶|

During playback, press **SKIP** ▶▶| to go to the next chapter. Press it repeatedly to skip subsequent chapters.
Press **SKIP** |◀◀ to go back to the beginning of the current chapter. Press it repeatedly to go back to the previous chapter.

Time Search

DVD-V | CD | VCD | DivX®

1) During playback, press **SEARCH MODE** repeatedly until the Time Search screen appears on the TV screen.



2) Within 30 seconds, enter a desired disc time using **the Number buttons**.
- Playback will start at the specified time.
- For DVDs, enter a desired time of the current title.
- For Audio CDs, Video CDs and discs with DivX® files, enter a desired time of the current track.
- Press **CLEAR** to erase the incorrect input.

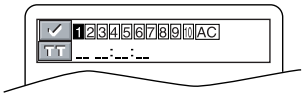
Note:
- "0" appears automatically when there is no need to enter a number. For example, "0:0_:_ _" appears in the Time Search display if the total time of the disc or track is less than 10 minutes.
- Time Search is not available on some discs.

Marker Setup

DVD-V | CD | VCD

Use markers to memorise your favourite places on a disc.

1) During playback, press **SEARCH MODE** repeatedly until the Marker Setup screen appears on the TV screen.



2) Press ◀ or ▶ to select 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 and ensure that "_ _ _ _:_ _:_ _" appears in the display.

3) When the disc reaches the desired point, press **ENTER**.
- The Title or Track and elapsed time will appear on the TV screen.

4) To return to the marker later, press **SEARCH MODE** repeatedly until the Marker Setup screen appears and ◄ or ► to choose the desired marker, then press **ENTER**.

5) Press **SEARCH MODE** or **RETURN** to exit.

Note:
- Opening the disc tray, turning off the power or selecting "AC" at step **2)** and press **ENTER** will erase all markers.
- To clear a marker, use ◄ or ► and select the marker number to be cleared, and then press **CLEAR**.
- You can mark up to 10 points.

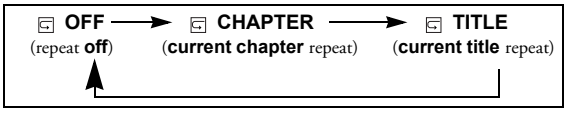
Repeat

- **REPEAT** is available only during playback.

REPEAT CHAPTER / TITLE

DVD-V

1) During playback, press **REPEAT**.
- The Repeat mode changes as described below every time you press the button.

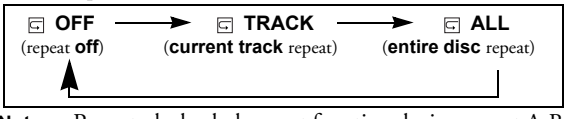


Note:
- Repeat Chapter/Title is not available with some scenes.
- Repeat playback does not function during repeat A-B playback.
- The Repeat Chapter/Title setting will be cleared when moving to other title or chapter.

REPEAT TRACK / GROUP / ALL

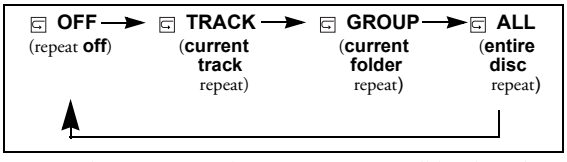
CD VCD

1) During playback, press **REPEAT**.
- The Repeat mode changes as described below every time you press the button.



Note:
- Repeat playback does not function during repeat A-B playback.
- The Repeat Track setting will be cleared when moving to other track.
- Repeat playback is not available when playing the Video CD with PBC function.

MP3 JPEG DivX®



Note:
- The Repeat Track / Group setting will be cleared when moving to other Track or Group.
- If you choose Group repeat during Dual Playback, all tracks or files in each folder will play repeatedly. For example, if you choose Group repeat during Dual Playback of MP3 folder A and JPEG folder B, all MP3 tracks in folder A and all JPEG files in folder B will be repeated.

REPEAT A-B

DVD-V CD VCD DivX®

1) During playback, press **A-B** at your chosen starting point.
- A- appears briefly on the TV screen.

2) Press **A-B** again at your chosen end point.
- A-B appears briefly on the TV screen, and the repeat sequence begins.

3) To exit the sequence, press **A-B**.

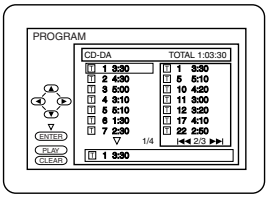
Note:
- The repeat A-B section can only be set within the current title (for DVDs), or the current track (for Audio CDs, Video CDs and discs with DivX® files).
- Repeat A-B is not available with some scenes in DVD.
- To cancel the point A which was set, press **CLEAR**.
- Repeat A-B playback does not function during chapter, title, track or all repeat playback.
- For some DivX® files, A-B Repeat playback may not function.

Programmed Playback

CD MP3 JPEG

You may determine the order in which tracks will be played.

1) In Stop mode, press **MODE**.
- The PROGRAM screen will appear.



2) Press ▲ or ▼ to select a track, then press **ENTER**.
- Up to 99 tracks can be stored.
- Press **CLEAR** to erase the most recently entered track.
- To erase all tracks in the programme at once, select "ALL CLEAR" at the bottom of the list and press **ENTER**.
- When selecting an MP3/JPEG file or folder, press **Cursor ◄ / ►** as follows:
  Press ► to go to the next hierarchy.
  Press ◄ to go back to the previous hierarchy (except for the top hierarchy).
- When more than 8 tracks or files are programmed, press **SKIP** |◄◄ ►►| to see all the pages.

3) Press **PLAY** ► to start the programmed playback.

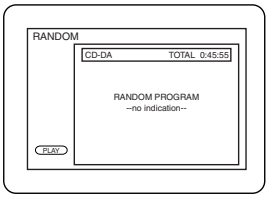
Note:
- While a programme is being played back, **STOP** ■ works as follows:
  Press **STOP** ■, and then **PLAY** ► next, so that the programmed playback restarts.
  (CD playback restarts from the current position. MP3 playback restarts from the beginning of the current track.)
  Press **STOP** ■ twice and **PLAY** ► next, so that playback restarts from the first track in the original order. However, your programmed playback can be restarted when you follow the above steps. (Your programme will be stored unless either the disc tray is opened or the unit is turned off.)
- To repeat the current track in the programme, press **REPEAT** repeatedly until TRACK appears during playback.
- To repeat the entire programme press **REPEAT** repeatedly until ALL appears during playback.
- Programmed Playback of MP3 or JPEG tracks is not available while Dual Playback is "ON".

Random Playback

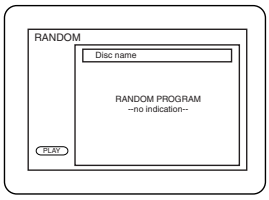
CD | MP3 | JPEG

This function shuffles the playing order of tracks instead of playback in the original sequence.

1) In Stop mode, press **MODE** repeatedly until the RANDOM screen appears on the TV screen.



Example: Audio CD



Example: MP3/JPEG (DUAL PLAYBACK-OFF)

2) Press **PLAY** ► to start Random Playback.

Note: • If you like to repeat the current track in the random selections, press **REPEAT** repeatedly until TRACK appears during playback. If you like to repeat the entire random selections, press **REPEAT** repeatedly until ALL appears during playback.

• You cannot go back to the previous track during Random Playback.

• Random Playback of MP3 or JPEG tracks is not available while Dual Playback is "ON".

Folder Playback

MP3 | JPEG

This function is available only when Dual Playback is "ON". You may select to play a folder.

1) In Stop mode, press **MODE**.
- The folder list will appear.

2) Press ▲ or ▼ to select a folder, and then press **PLAY** ► or **ENTER**.
- MP3 tracks and JPEG files in the selected folder will play simultaneously.

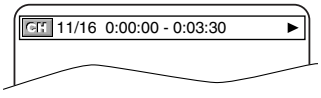
3) Press **MODE** again to exit.

On-Screen Information

You can check the information about the current playback by pressing **DISPLAY**.

DVD-V

1) During playback, press **DISPLAY**.
- Current chapter number/ total chapters, elapsed time and remaining time of the current chapter, and current playback status will be displayed.



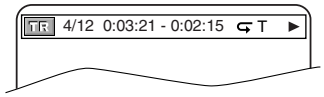
2) Press **DISPLAY** again.
- Current title number/ total titles, elapsed time and remaining time of the current title, and current playback status will be displayed.

3) Press **DISPLAY** the third time.
- The Bit Rate (the amount of audio and video data currently being read) and current playback status will be displayed.
- Current repeat setting appears only when the repeat setting is active.
  (⊂C: Chapter repeat/ ⊂T: Title repeat/ A ⊂B: A-B repeat)
- If you are playing a 2-layered disc, the layer number will also be displayed.
  (L0: Layer 0 is playing, L1: Layer 1 is playing)

4) Press **DISPLAY** repeatedly until on-screen information disappears.

CD | VCD

1) During playback, press **DISPLAY**.
- Current track number/ total tracks, elapsed time and remaining time of the current track, and current playback status will be displayed.
- Current repeat setting appears only when the Repeat setting is active.
  (⊂T: Track repeat/ ⊂A: All Tracks repeat/ A ⊂B: A-B repeat)

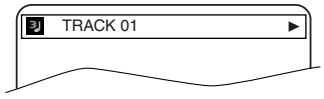


2) Press **DISPLAY** again.
- Current track number/ total tracks, elapsed time and remaining time of the current disc, and current playback status will be displayed.
- For Audio CDs, when you are playing a disc in PROGRAM or RANDOM mode, PROGRAM (or RANDOM) will be displayed.
- Current repeat setting appears only when the Repeat setting is active.

3) Press **DISPLAY** repeatedly until on-screen information disappears.

MP3 | JPEG | DivX®

1) During playback, press **DISPLAY**.
- The name of the file currently in play and current playback status will be displayed.



2) Press **DISPLAY** again.
- For MP3, current track number/ total tracks, elapsed time of the current track, and current playback status will be displayed.
- For JPEG, current track number/ total tracks will be displayed.
- For discs with DivX® files, current track number/ total tracks, elapsed time and remaining time of the current track, and current playback status will be displayed.
- Current repeat setting appears only when the Repeat setting is active.
  (⊂T: Track repeat/ ⊂G: Group repeat/ ⊂A: Disc repeat)

3) Press **DISPLAY** repeatedly until on-screen information disappears.

Note: • When you are playing a disc in PROGRAM, RANDOM or FOLDER PLAYBACK mode, press **DISPLAY** twice at step **2)** to display PROGRAM (RANDOM or FOLDER PLAYBACK).

• When the Dual Playback is "ON", JPEG file name and MP3 track name will be displayed.

• Programmed and Random Playback are available only when Dual Playback is "OFF".

• Folder Playback is available only when Dual Playback is "ON".

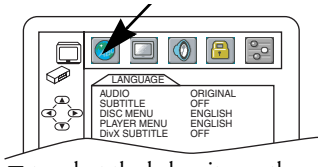
DVD Setup

In Setup menu, QUICK mode, CUSTOM mode and INIT. mode (refer to pages 23-25) are available. QUICK mode consists of the setting menus often needed, and you can make all settings required in CUSTOM mode. You can make the settings of the items with **QUICK** mark in QUICK mode.

Language Setting

Language setting can be varied with some DVDs or DivX® Subtitles recorded in CD-R/RW.

1) In Stop mode, press **SETUP**.
2) Press ◄ or ► to select "CUSTOM", then press **ENTER**.
   •CUSTOM mode screen will appear.
3) Press ◄ or ► to select "LANGUAGE", then **ENTER** to confirm.



4) Press ▲ or ▼ to select the below items, then press **ENTER**.
5) Press ▲ or ▼ to select an option, then press **ENTER**.
6) Press **SETUP** to exit.

AUDIO (*1, 2, 3) :
- Sets the audio language.
- The default setting is "ORIGINAL" (original audio language of the disc).

SUBTITLE (*1, 2, 3) :
- Sets the subtitle language.
- The default setting is "OFF".

DISC MENU (*1, 2) :
- Sets the language for the DVD menu.
- The default setting is "ENGLISH".

PLAYER MENU : QUICK
- Sets the language for the On-Screen display.
- The default setting is "ENGLISH".

DivX® SUBTITLE (*4) :
- Sets the DivX® subtitle language.
- The default setting is "OFF".

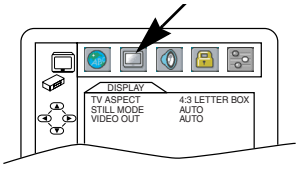
Note:

*1 : If "OTHER" is selected in the "AUDIO", "SUBTITLE" or "DISC MENU" screen, press 4-digit number to enter the code for a language you choose. (Refer to "Language Code" on page 25.)
*2 : Only the languages supported by the disc can be selected.
*3 : Even if DVDs contain multiple audio or subtitle languages, "LANGUAGE" setting screen for "AUDIO" or "SUBTITLE" may not be available with some discs. Then, use **AUDIO** or **SUBTITLE**. (Refer to page 19.)
*4 : If you want to display the Russian subtitle, you can select either "RUSSIAN1" or "RUSSIAN2" which depends on type of the subtitle files.

Display Setting

You can change the display functions.

1) In Stop mode, press **SETUP**.
2) Press ◄ or ► to select "CUSTOM", then press **ENTER**.
   •CUSTOM mode screen will appear.
3) Press ◄ or ► to select "DISPLAY", then **ENTER** to confirm.



4) Press ▲ or ▼ to select the below items, then press **ENTER**. Select options following instructions below.
5) Press **SETUP** to exit.

TV ASPECT : QUICK

4:3 LETTER BOX : When viewing a 16:9 picture on a 4:3 aspect TV screen, black bars appear on the top and bottom of the screen.
4:3 PAN & SCAN : When viewing a 16:9 on a 4:3 aspect TV screen, a full height picture with both sides trimmed is presented.
16:9 WIDE : If a wide-screen TV is connected to this unit, select this setting.

- Press ▲ or ▼ to select a setting, then press **ENTER**.
- The default setting is "4:3 LETTER BOX".

STILL MODE :

AUTO : Automatically select the best resolution setting ("FRAME" or "FIELD") based on the data characteristics of the pictures.
FIELD : Select "FIELD" when the pictures are still unstable even if "AUTO" is selected. "FIELD" stabilizes the pictures, although the picture quality may become coarse due to the limited amount of data.
FRAME : Select "FRAME" to display relatively motionless pictures in higher resolution. "FRAME" improves the picture quality, although it may unstabilize the pictures due to simultaneous output of two FIELD data.

Note: • An individual picture on TV screen is called as FRAME, which consists of two separate images called as FIELD. Some pictures may be blurred at the "AUTO" setting in Still mode due to their data characteristics.

- Press ▲ or ▼ to select an option, then press **ENTER**.
- The default setting is "AUTO".

VIDEO OUT :

AUTO : to change video out system (PAL/NTSC) automatically according to the format of an inserted disc.
  • For the discs recorded with NTSC system, the NTSC signal will be output and pictures of the discs can be viewed on an NTSC or Multi system TV.
  • For the discs recorded with PAL system, the PAL signal will be output and pictures of the discs can be viewed on a PAL system TV.
PAL : to view pictures of the discs recorded with NTSC system on a PAL system TV. The modified PAL signal will be output.

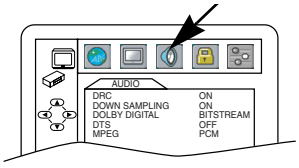
Note: • The discs of recorded with PAL system cannot be viewed on an NTSC system TV.

- Press **ENTER** repeatedly to select "PAL" or "AUTO".
- The default setting is "AUTO".

Audio Setting

Choose the appropriate audio settings for your equipment. It only affects during the playback of DVDs.

1) In Stop mode, press **SETUP**.
2) Press ◄ or ► to select "CUSTOM", then press **ENTER**.
   •CUSTOM mode screen will appear.
3) Press ◄ or ► to select "AUDIO", then **ENTER** to confirm.



4) Press ▲ or ▼ to select the below items.
5) Press **ENTER** repeatedly to select "ON" or "OFF".
6) Press **SETUP** to exit.

DRC (Dynamic Range Control) :

ON : to compress the sound range.
OFF : to output an original sound range.

- This function is only available on DVDs recorded in the Dolby Digital format.
- The default setting is "ON".

DOWN SAMPLING :

ON : to convert 96 kHz format into 48 kHz.
OFF : to output the original sound.

- This function is only available when this unit is connected to another source using one of the DIGITAL AUDIO OUT jacks.
- When playing a disc with copyright protection, the sound will be down sampled at 48 kHz, even if you set to "OFF".
- The default setting is "ON".

DOLBY DIGITAL : QUICK

BITSTREAM : to output Dolby Digital signals.
PCM : to convert Dolby Digital signals to PCM (2 channel) signals.

- Set to "BITSTREAM" when this unit is connected to a Dolby Digital decoder.
- The default setting is "BITSTREAM".

DTS : QUICK

BITSTREAM : to output DTS sound.
OFF : not to output DTS sound.

- Set to "BITSTREAM" when this unit is connected to a DTS decoder.
- The default setting is "OFF".

MPEG : QUICK

BITSTREAM : to output MPEG formatted sound.
PCM : to convert MPEG signals to PCM signals.

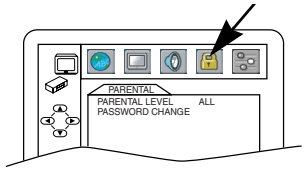
- Set to "BITSTREAM" when this unit is connected to an MPEG decoder.
- The default setting is "PCM".

Parental Control

Parental Control prevents viewing of DVDs that exceed your rating limit. The password is required to change the "PARENTAL LEVEL".

This feature prevents your children from viewing inappropriate materials.

1) In Stop mode, press **SETUP**.
2) Press ◄ or ► to select "CUSTOM", then press **ENTER**.
•CUSTOM mode screen will appear.
3) Press ◄ or ► to select "PARENTAL", then press **ENTER**.



4) Press **the Number buttons** to enter your 4-digit password.
•When doing this for the first time, enter any 4-digit number by pressing **the Number buttons** (except for 4737), then press **ENTER**. That number will be used as the password from the second time onward. Record your password in case you forget it.
•If you forget the password, press **4**, **7**, **3**, **7**. The original password will be cleared and parental levels will be set to "ALL". Enter a new 4-digit password, then press **ENTER**.
5) Press ▲ or ▼ to select "PARENTAL LEVEL", then press **ENTER**.
6) Press ▲ or ▼ to select the desired level, then press **ENTER.** For details, see below.
7) Press **SETUP** to exit.

PARENTAL LEVEL :

ALL : All parental locks are cancelled.
8 : DVD softwares of any grades (adult/general/children) can be played back.
7 to 2 : Only DVD softwares intended for general use and children can be played back.
1 : Only DVD softwares intended for children can be played back.

Note: • This function may not work on some DVDs. Make sure if the parental lock function operates in the way you have set.

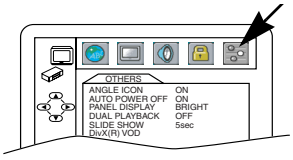
To Change the Password

1) Follow the steps **1)** to **4)** above.
2) Press ▲ or ▼ to select "PASSWORD CHANGE", then press **ENTER**.
3) Enter a new 4-digit password, then press **ENTER**.
4) Press **SETUP** to exit.

Others Setting

You can change the other functions.

1) In Stop mode, press **SETUP**.
2) Press ◄ or ► to select "CUSTOM", then press **ENTER**.
•CUSTOM mode screen will appear.
3) Press ◄ or ► to select "OTHERS", then **ENTER** to confirm.



4) Press ▲ or ▼ to select the below items, then press **ENTER**. Select options following instructions below.
5) Press **SETUP** to exit.

ANGLE ICON :

ON : to show the angle icon when multiple camera angles are available during DVD playback.
OFF : to hide the angle icon.

- Press **ENTER** repeatedly to select "ON" or "OFF".
- The default setting is "ON".

AUTO POWER OFF :

ON : to turn off the unit automatically after 30 minutes of no use.
OFF : to keep this unit on.

- Press **ENTER** repeatedly to select "ON" or "OFF".
- The default setting is "ON".

DUAL PLAYBACK :

ON : to play MP3 tracks and JPEG files simultaneously.
OFF : to play MP3 tracks and JPEG files separately.

- Press **ENTER** repeatedly to select "ON" or "OFF".
- The default setting is "OFF".

SLIDE SHOW :

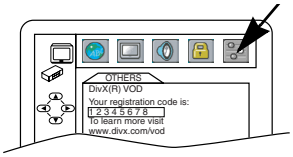
5sec : to display each image for 5 seconds.
10sec : to display each image for 10 seconds.
MUSIC : to display an image for each MP3 sound file playback when Dual Playback is "ON".

- If you select "MUSIC" when Dual Playback is "OFF", the playback speed will be set to 5 seconds automatically.

- Press ▲ or ▼ to select an option, then press **ENTER**.
- The default setting is "5sec".

DivX(R) VOD :

- This unit allows you to use the DivX® Video-On-Demand (VOD) services. You can play back the files purchased or rental from the VOD services. You need to have a registration code to purchase or rental VOD files. Please visit www.divx.com/vod for more details.

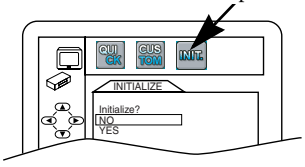


Note:
- You cannot play back the DivX® VOD files obtained with different registration codes on this player.
- You cannot play back the DivX® VOD files, of which rental period has been expired. In such case, press **MENU** and select other files that can be played back.
- Some DivX® VOD files are restricted with the limited playable times (you cannot play them back beyond the limit). If your DivX® VOD file has such limit, the playback confirmation screen will appear. Press ◄ or ► to select "YES" if you want to play back the file, or to select "NO" if you do not wish to play it back. Then, press **ENTER** to confirm the selection.
- Please send your inquiries regarding the VOD files to DivX®, Inc.

To Reset All the Settings of the Setup Screen

This function allows you to return all selections of Setup (except for "PARENTAL") to their default settings.

1) In Stop mode, press **SETUP**.
2) Press ◄ or ► to select "INIT.", then press **ENTER**.



3) Press ▲ or ▼ to select "YES", then press **ENTER** twice. All the settings (except for "PARENTAL") will be cleared.
- To cancel the initialization, select "NO".

4) Press **SETUP** to exit.

Language Code

Language	Code	Language	Code	Language	Code	Language	Code
A-B		Frisian	5271	Malay	5965	Somali	6561
Abkhazian	4748	Galician	5358	Malayalam	5958	Spanish [SPA]	5165
Afar	4747	Georgian	5747	Maltese	5966	Sundanese	6567
Afrikaans	4752	German [GER]	5051	Maori	5955	Swahili	6569
Albanian	6563	Greek [GRE]	5158	Marathi	5964	Swedish [SWE]	6568
Amharic	4759	Greenlandic	5758	Moldavian	5961	**T**	
Arabic	4764	Guarani	5360	Mongolian	5960	Tagalog	6658
Armenian	5471	Gujarati	5367	Nauru	6047	Tajik	6653
Assamese	4765	Hausa	5447	Nepali	6051	Tamil	6647
Aymara	4771	Hebrew	5569	Norwegian [NOR]	6061	Tatar	6666
Azerbaijani	4772	Hindi	5455	**O-R**		Telugu	6651
Bashkir	4847	Hungarian [HUN]	5467	Occitan	6149	Thai	6654
Basque	5167	**I-K**		Oriya	6164	Tibetan	4861
Bengali;Bangla	4860	Icelandic [ICE]	5565	Oromo(Afan)	6159	Tigrinya	6655
Bhutani	5072	Indonesian	5560	Panjabi	6247	Tonga	6661
Bihari	4854	Interlingua	5547	Pashto;Pushto	6265	Tsonga	6665
Bislama	4855	Interlingue	5551	Persian	5247	Turkish [TUR]	6664
Breton	4864	Inupiak	5557	Polish [POL]	6258	Turkmen	6657
Bulgarian	4853	Irish [IRI]	5347	Portuguese [POR]	6266	Twi	6669
Burmese	5971	Italian [ITA]	5566	Quechua	6367	**U-Z**	
Byelorussian	4851	Japanese [JPN]	5647	Rhaeto-Romance	6459	Ukrainian	6757
C-E		Javanese	5669	Romanian [RUM]	6461	Urdu	6764
Cambodian	5759	Kannada	5760	Russian [RUS]	6467	Uzbek	6772
Catalan	4947	Kashmiri	5765	**S**		Vietnamese	6855
Chinese [CHI]	7254	Kazakh	5757	Samoan	6559	Volapuk	6861
Corsican	4961	Kinyarwanda	6469	Sangho	6553	Welsh	4971
Croatian	5464	Kirghiz	5771	Sanskrit	6547	Wolof	6961
Czech [CZE]	4965	Kirundi	6460	Scots Gaelic	5350	Xhosa	7054
Danish [DAN]	5047	Korean [KOR]	5761	Serbian	6564	Yiddish	5655
Dutch [DUT]	6058	Kurdish	5767	Serbo-Croatian	6554	Yoruba	7161
English [ENG]	5160	**L-N**		Sesotho	6566	Zulu	7267
Esperanto	5161	Laothian	5861	Setswana	6660		
Estonian	5166	Latin	5847	Shona	6560		
F-H		Latvian;Lettish	5868	Sindhi	6550		
Faroese	5261	Lingala	5860	Singhalese	6555		
Fiji	5256	Lithuanian	5866	Siswat	6565		
Finnish [FIN]	5255	Macedonian	5957	Slovak	6557		
French [FRE]	5264	Malagasy	5953	Slovenian	6558		

If you choose a Language that has a 3-letter abbreviation, the abbreviation will be displayed every time you change the Audio or Subtitle language setting on page 19. If you choose any other languages, "---" will be displayed instead. (3-letter abbreviations are written in brackets.)

Troubleshooting Guide

If the unit does not perform properly when operated as instructed in this Owner's Manual, check the unit, consulting the following checklist.

WARNING: Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.
If a fault occurs, first check the points listed below before taking the system for repair.

Problem	Solution
No power	• Check if the AC power cord is properly connected.
No picture	• Check if the TV is switched on. • Check the video connection.
Distorted picture	• Sometimes a small amount of picture distortion may appear. This is not a malfunction.
Completely distorted picture or black/white picture with DVD	• Connect this unit directly to the TV. • Make sure the disc is compatible with this unit.
No sound or distorted sound	• Adjust the volume. • Check that the speakers are connected correctly. • ANALOG AUDIO OUT and Euro AV (scart) jack of this unit are not available on the DTS audio.
No audio at digital output	• Check the digital connections. • Check the audio settings.
No sound and picture	• Check that the cable is connected to the correct device. (Refer to pages 7 and 8.)
Picture freezes momentarily during playback.	• Check the disc for fingerprints/scratches and clean with a soft cloth wiping from centre to edge.
Disc cannot be played.	• Ensure the disc label is facing up. • Check if the disc is defective by trying another disc. • Handle a disc with special care so that it does not have fingerprints, scratches, or dusts on its surface.
No return to start-up screen when disc is removed.	• Reset the unit by turning it off and on again.
This unit does not respond to the remote control.	• Aim the remote control directly at the sensor on the front panel. • Reduce the distance to this unit. • Replace the batteries in the remote control. • Re-insert the batteries with their polarities (+/- signs) as indicated.
Buttons do not work or this unit stops responding.	• To completely reset this unit, unplug the AC power cord from the AC outlet for 5-10 seconds.
This unit does not respond to some operating commands during playback.	• Operations may not be permitted by the disc. Refer to the instructions of the disc.
This unit cannot read CDs/DVDs.	• Use a commonly available cleaning CD/DVD to clean the lens before sending this unit for repair.
This unit switches from DVD mode to VCR mode automatically.	• This occurs 30 minutes after no DVD operation is in progress. This is not a malfunction.
The VCR does not record a TV programme.	• Make sure the tape has an erase-prevention tab. • Make sure this unit is in VCR mode.
The VCR does not perform a timer recording.	• Make sure the start and the stop recording times are set correctly. • Make sure the tape has an erase-prevention tab. • Make sure the clock is set. • This unit may not perform or continue a timer recording if the power fails for more than 30 seconds.
The motor (cylinder) rotates even when tape playback is stopped.	• To enable quick play mechanism, the cylinder will rotate for about 5 minutes. This is normal.
You cannot insert a tape.	• Insert a tape with window side up and the erase-prevention tab facing you. • Gently push the centre of the tape when putting into the cassette compartment.
You cannot remove a tape.	• Make sure the power plug is completely connected to a power outlet.

- Some functions are not available in specific modes, but this is not a malfunction. Read the description in this Owner's Manual for details on correct operations.
- Playback from a desired track and Random Playback are not available during Programmed Playback.
- Some functions are prohibited on some discs.

If you are unable to remedy a problem by following these hints, consult your dealer or service centre.

Specifications

PRODUCT TYPE
DVD/CD PLAYER & VIDEO CASSETTE RECORDER

DISCS
DVD-Video
Audio CD
Video CD
CD-R
CD-RW

OUTPUT SIGNAL FORMAT
PAL colour

FREQUENCY RESPONSE
DVD (linear sound) : 20 Hz to 22 kHz (sample rate: 48 kHz)
20 Hz to 44 kHz (sample rate: 96 kHz)
CD : 20 Hz to 20 kHz (JEITA)

SIGNAL-TO-NOISE RATIO (S/N RATIO)
CD : 70 dB (JEITA)

DYNAMIC RANGE
DVD (linear sound) : 70 dB
CD : 70 dB (JEITA)

TOTAL DISTORTION FACTOR
DVD : 0.1%
CD : 0.1% (JEITA)

WOW AND FLUTTER
Below the measurement limitation (+/-0.001% W PEAK) (JEITA)

CONNECTIONS

Front Panel:	
Video input	RCA connector x 1
Audio input	RCA connector x 2
Rear Panel:	
AERIAL	Coaxial type, female
RF OUT	Coaxial type, male
AUDIO/VIDEO	21 pin scart jack x 2
S-Video output	Mini DIN 4-pin jack (75 ohm)
Analog audio output	Two RCA connectors (one left channel, one right channel) 2 Vrms (100 kilo-ohm)
Coaxial digital audio output	One pin jack, 500 mVpp (75 ohm)
Optical digital audio output	Optical connector

POWER SOURCE
220-240 V ~ +/- 10%, 50 Hz +/- 0.5%

POWER CONSUMPTION
25 W (standby: 5 W)

OPERATING TEMPERATURE
5°C to 40°C

DIMENSIONS
W 435 mm
H 94 mm
D 233 mm

WEIGHT
Approx. 3.2 kg

- Designs and specifications are subject to change without notice.

Maintenance

Cleaning the Cabinet

- Use a soft cloth slightly moistened with a mild detergent solution. Do not use a solution containing alcohol, spirits, ammonia or abrasives.

Cleaning Discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the centre out. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, or antistatic spray intended for analogue records.

Cleaning the disc lens

- After prolonged use, dirt or dust may accumulate at the disc lens. To ensure good playback quality, clean the disc lens with CD Lens Cleaner or any commercially available cleaner. Follow the instructions supplied with the cleaner.

Auto Head Cleaning

- This feature automatically cleans the heads as you insert or remove a cassette to ensure a clear picture.
- The playback picture may become blurred or interrupted even if the TV programme received is clear. This does not mean that the recorded programme has been erased. This problem is caused by dirt accumulated on the head after long periods of use, or usage of rental or old tapes. In this case, head cleaning requires highly technical expertise and the nearest dealer should therefore be consulted. Clean heads only when problems occur.

Servicing

- Please refer to relevant topics on the "Troubleshooting Guide" before returning the product.
- Should your unit become inoperative, do not try to correct the problem by yourself. There are no user-serviceable parts inside. Turn the unit off, unplug the power cord, and take the unit to a Service Centre for servicing.

Make your contribution to the environment!!!

- Spent batteries do not belong in the dustbin.
- You can dispose of them at a collection point for spent batteries or special waste.

Contact your council for details.

Declaration of Conformity

This product complies with the requirement of the directives

EMC-Directive:	89 / 336 / EEC
Low Voltage Directive:	73 / 23 / EEC
CE Marking:	93 / 68 / EEC

CE

We declare that the following product:
DVD/CD PLAYER &
VIDEO CASSETTE RECORDER,
Model DBVR-7730D
Trade Name: Funai
is in compliance with following Regulations.

EN 55013: 2001 + A1: 2003, EN 55020: 2002 + A1: 2003,
EN 61000-3-2: 2000
EN 61000-3-3: 1995 + A1: 2001
EN 60065: 2002
EN 60825-1 Ed. 1. 2: 2001

Questions and Help on this products, please call

Help Line: 0870 3833010 in the UK.

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